

Indian Hemp Drugs Commission:

VOL. IV.

EVIDENCE OF WITNESSES

FROM

BENGAL AND ASSAM

TAKEN BEFORE THE

INDIAN HEMP DRUGS COMMISSION.



CALCUTTA :

OFFICE OF THE SUPERINTENDENT OF GOVERNMENT PRINTING, INDIA.

1894.

JOHNSON REPRINT CORPORATION

New York • London

1971

First reprinting 1971, Johnson Reprint Corporation:

JOHNSON REPRINT CORPORATION
111 Fifth Avenue, New York, NY 10003, U.S.A.

JOHNSON REPRINT COMPANY LTD
Berkeley Square House, London, W1X 5LB, England



Printed in Great Britain by
THE SCOLAR PRESS LIMITED
MENSTON

QUESTIONS FRAMED BY THE COMMISSION.

Evidence before the Indian Hemp Drugs Commission, 1893-94.

CHAPTER I.

INTRODUCTORY.

1. What opportunities have you had of obtaining information regarding the matters connected with hemp drugs in regard to which your answers are framed?

2. In the most recent work on ganja (Dr. Prain's report of 21st June 1893) it is stated that "in India three narcotic articles are obtained naturally from hemp. These are, siddhi or bhang, charas, and ganja." They are thus defined by Dr. Prain: "Siddhi, bhang, subji or patti are different names applied to the dry leaves of the hemp plant, whether male or female and whether cultivated or uncultivated."

"Charas is the name applied to the resinous matter which forms the active principle of the plant when collected separately."

"Ganja consists of the dried flowering tops of cultivated female hemp plants which have become coated with resin in consequence of having been unable to set seeds freely. The formation of seeds is prevented by the destruction of all the male plants."

"Three varieties of ganja are sold. Ganja is usually manufactured by being trodden under foot, so that the agglutinated flower-tops assume a flattened shape. This is 'Flat ganja.' The other sort of ganja is not trodden, but rolled under foot, so that the agglutinated flower-tops are less closely adherent, and assume a rounded shape. This is 'Round ganja.' The flower-tops of ganja detached from the twigs, whether of flat or of round ganja, and whether the detachment has been accidental or deliberate, form 'chur' or 'Broken ganja.'"

May these definitions be accepted for your province? By what name is each of these products locally known?

CHAPTER II.

CULTIVATION OR GROWTH OF HEMP.

(*Cannabis sativa*.)

3. In what districts of which you have knowledge does the hemp plant grow spontaneously? Mention any in which it is abundant.

4. By what different names is it known? Do these refer to exactly the same plant?

5. What special conditions of climate, soil, rainfall, elevation above sea level, etc., are necessary to the growth of the wild hemp?

6. Is the growth of the wild hemp ordinarily dense, or scattered?

7. Is there any cultivation of the hemp plant in your province—

(a) for production of ganja;

(b) for production of charas;

(c) for use as bhang;

(d) for its fibre or seeds;

If so, where and to what extent?

8. If there has recently been any considerable increase or decrease in the area under such cultivation, state the reason.

9. Give any particulars you are able regarding the methods of such cultivation.

10. Do the persons who cultivate hemp for its narcotic properties form a special class? Or are they of the same classes as other agricultural cultivators?

11. Are the plants cultivated for the production of ganja ever raised from the seed of the wild hemp?

12. Have you any reason to suppose that the (so-called) wild hemp is anywhere specially cultivated for the production of ganja? If so, give the names of the districts or tracts in which this occurs, and your opinion as to the extent to which the practice exists. Is the male plant extirpated in such cases?

13. (a) Is the cultivation of hemp plant for ganja restricted in your province? If so, to what districts? Why were they selected? If not restricted, is the cultivation common to all districts?

(b) Are there any special conditions of climate, soil, rainfall, elevation above sea-level, etc., which are necessary for the cultivation of hemp for producing ganja?

(c) Is there any part of your province where its cultivation would be impossible?

CHAPTER III.

PREPARATION OR MANUFACTURE.

14. Are any of the following products of the hemp plant prepared in your province:—

(a) ganja,

(b) charas,

(c) bhang?

If so, where and to what extent?

15. Give any particulars you are able regarding the methods of such preparation, distinguishing specially the methods of preparation from (a) the cultivated, and (b) the wild plant respectively, and distinguishing also preparations for (A) smoking, (B) eating, and (C) drinking.

16. (a) Is bhang prepared generally by the people in their houses?

(b) Can it be prepared from the hemp plant wherever grown?

(c) Can ganja or charas also be prepared from the wild plant wherever grown?

17. By what classes of the people are the preparations of the hemp drug respectively made?

18. Does any of these three drugs (ganja, charas, and bhang) deteriorate by keeping? Does

it quite lose its effect in time? How long does it keep good with ordinary care? What are the causes of deterioration? What special measures can be taken to prevent deterioration?

CHAPTER IV.

TRADE.

(Statistics to be obtained from Government offices.)

CHAPTER V.

CONSUMPTION OR USE.

NOTE.—It is very important, in answering the questions framed under this chapter, to distinguish carefully between ganja, charas, and bhang. The answer should deal only with those forms of the drug known to the witness, and should clearly specify in each case the form or forms to which his statements apply.

19. Are ganja and charas used only for smoking? If not, name any other uses to which either is put, with particulars as to such uses, and the places where they are prevalent.

20. What classes and what proportion of the people smoke ganja and charas respectively? and in what localities?

21. What kind of ganja (flat, round or "chur") is preferred for smoking? If different kinds are used in different localities, give particulars.

22. What charas, native or foreign, is chiefly used? If foreign, whence is it imported?

23. Is bhang ever used for smoking? If so, in what localities, by what classes of the people, and to what extent?

24. What classes and what proportions of the people respectively (a) eat or (b) drink bhang, and in what localities?

25. Is the use of ganja, charas, and bhang, or of any of these drugs, on the increase or on the decrease?

Give any reasons you are able.

26. State for each of these drugs what proportion of the consumers are—

- (a) Habitual moderate consumers,
- (b) Habitual excessive consumers,
- (c) Occasional moderate consumers,
- (d) Occasional excessive consumers.

27. What classes of the people are each of these mainly taken from, and what in each case are the habits of life or circumstances which mainly lead to the practice?

28. What is the average allowance and cost of each of these drugs per diem to—

- (a) Habitual moderate consumers,
- (b) Habitual excessive consumers?

29. What ingredients are (a) ordinarily or (b) exceptionally mixed with any of these drugs by the different classes of consumers? Is dhatura so used? What is the object of these admixtures?

Do you know of any preparation (such as "bhang massala") which is sold for the purpose of being mixed with any of these drugs? Describe its ingredients.

30. (a) To what extent is the consumption of each of these three drugs practised in solitude or in company?

(b) Is it mainly confined to the male sex or to any time of life?

(c) Is it usual for children to consume any of these drugs?

31. (a) Is the habit of consuming any of these drugs easily formed?

(b) Is it difficult to break off?

(c) Is there a tendency in the case of any of these drugs for the moderate habit to develop into the excessive?

32. (a) Mention any customs, social or religious, in regard to the consumption of any of these drugs. Give an account of every such custom.

(b) Is the use of the drug in connection with such custom regarded as essential?

(c) Is it generally temperate or excessive?

(d) Is it likely to lead to the formation of the habit, or otherwise injurious?

33. (a) How is the consumption of each of these drugs generally regarded?

(b) Can it be said that there is any public opinion (social or religious) in regard to the practice? If so, what? If you think that the use of any form of the narcotic is generally in disrepute, to what do you attribute that sentiment?

(c) Is there any custom of worshipping the hemp plant on certain occasions by certain sects of the people?

34. Would it be a serious privation to any class of consumers to forego the consumption of the drug they use? Give your reasons in each case. Give some idea of the probable numbers of each class.

35. (a) Would it be feasible to prohibit the use of any or all of these drugs?

(b) Would the drug be consumed illicitly?

(c) How could the prohibition be enforced?

(d) Would the prohibition occasion serious discontent among the consumers?

(e) Would such discontent amount to a political danger?

(f) Would the prohibition be followed by recourse to (a) alcoholic stimulants or (b) other drugs?

36. Is there any reason for thinking that alcohol is now being to a certain extent substituted for any of these drugs? If so, to what causes do you attribute this change, and what proof is there of its reality?

CHAPTER VI.

EFFECTS.

NOTE.—It is very important, in answering the questions framed under this chapter, to distinguish carefully between ganja, charas, and bhang. The answer should deal only with the form of hemp known to witness, and should clearly specify in each case the form or forms to which his statements apply, and the particular experiences on which they are based. Question 56 deals with the effect of admixtures. This should also be referred to in answering any question where any such admixture generally affects the case. But the answer ought, in the first instance to deal with the effect of the hemp drug apart from any such admixture.

37. Are the effects of charas smoking different in any particular from those resulting from ganja smoking? If so, state the difference.

38. Have the three different preparations of ganja (round and flat ganja and "chur") any different effects in kind or degree on consumers?

39. Is the smoking of any preparation of the hemp plant in any way a less injurious form of consumption than drinking or eating the same or any other preparation? Give reasons for your answer.

40. (a) Is the use of any of these drugs prescribed on account of its medicinal qualities by any school of Native Doctors?

(b) Are any of them used in the treatment of cattle disease?

41. May the moderate use of charas, ganja, or bhang be beneficial in its effects—

(a) as a food accessory or digestive;

(b) to give staying-power under severe exertion or exposure, or to alleviate fatigue;

(c) as a febrifuge or preventive of disease in malarious and unhealthy tracts;

(d) in any other way.

What classes (if any) use the drug for any of the above purposes, and in what proportion of such classes? Is it the moderate habitual use or moderate occasional use of the drug which you refer to?

42. If not beneficial, do you consider the moderate use of any of these drugs to be harmless? Give reasons for your answer.

43. Are moderate consumers inoffensive to their neighbours?

44. (a) What is the immediate effect of the moderate use of any of these drugs on the habitual consumer?

(b) Is it refreshing?

(c) Does it produce intoxication?

(d) Does it allay hunger?

(e) Does it create appetite?

(f) How long does the effect last?

(g) Are there any after-effects?

(h) Does the want of subsequent gratification produce any longing or uneasiness?

45. (a) Does the habitual moderate use of any of these drugs produce any noxious effects—physical, mental, or moral?

(b) Does it impair the constitution in any way?

(c) Does it injure the digestion or cause loss of appetite?

(d) Does it cause dysentery, bronchitis, or asthma?

(e) Does it impair the moral sense or induce laziness or habits of immorality or debauchery?

(f) Does it deaden the intellect or produce insanity?

If it produces insanity, then of what type, and is it temporary or permanent?

If temporary, may the symptoms be re-induced by use of the drug after liberation from restraint?

Are there any typical symptoms?

Do insanes, who have no recorded ganja history, confess to the use of the drug?

(g) In such cases of the alleged connection between insanity and the use of hemp as are known to you, are you of opinion that the use of the drug by persons suffering from mental anxiety or brain disease to obtain relief has been sufficiently considered in explaining that connection?

And do you think there is any evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs by a person who is deficient in self-control through weakened intellect?

Give an account under each of these points of any cases with which you are acquainted.

46. Discuss the same question in regard to the habitual excessive use of any of these drugs.

47. Does the habitual moderate use of any of these drugs appear to be a hereditary habit or to affect in any way the children of the moderate consumer?

48. Discuss the same question in regard to the habitual excessive use of any of these drugs.

49. (a) Is the moderate use of any of these drugs practised as an aphrodisiac?

(b) Is it so used by prostitutes?

(c) Is the use for this purpose more injurious than its use as an ordinary narcotic, and, if so, how?

(d) Does the use of hemp tend to produce impotence?

50. Discuss the same question in regard to the excessive use of any of these drugs.

51. (a) Are any large proportion of bad characters habitual moderate consumers of any of these drugs?

(b) What connection, if any, has the moderate use with crime in general or with crime of any special character?

52. Discuss the same question in regard to the excessive use of any of these drugs.

53. Does excessive indulgence in any of these drugs incite to unpremeditated crime, violent or otherwise? Do you know of any case in which it has led to temporary homicidal frenzy?

54. Are these drugs used by criminals to fortify themselves to commit a premeditated act of violence or other crime?

55. (a) Do criminals, in order to further their designs, induce their victims to partake of any of these drugs and so stupefy themselves?

(b) Can complete stupefaction be thus induced by this drug without admixture.

56. How are the effects of hemp, used (a) in moderation and (b) in excess, modified by the admixture of other substances? Note specially any information you possess regarding the admixture of dhatura for personal consumption or for administration to others.

57. Ganja and charas are said sometimes to be eaten or drunk. Where this is the case, give your experience as to the effects, dealing separately with any of the heads in the preceding questions which seem to require notice.

CHAPTER VII.

ADMINISTRATION—TAXATION: CONTROL.

58. If you are acquainted with the present system of Excise Administration in your province in respect of hemp drugs, do you consider it to be working well, or do you consider it to be capable of improvement?

59. If capable of improvement, indicate in what direction or directions, giving reasons for your answer.

60. If ganja is produced in your province, do you think that the cultivation of the ganja-bearing plant and the process of its preparation are sufficiently controlled, or that the system requires modification in any respect? If so, in what respects and why?

61. If charas is produced in your province, do you think the cultivation of the hemp plant for its production and the process of preparation are sufficiently controlled, or that the system requires modification in any respect. If so, in what respects and why?

62. Do you think that the cultivation of the hemp plant for the production of bhang should be in any way controlled? Would this be feasible? If so, indicate the method by which such control could be exercised.

63. Have you any objection to the present system of $\frac{a \text{ wholesale}}{b \text{ retail}}$ vend of $\frac{1 \text{ ganja}}{2 \text{ charas}}$ or preparations of them? If you have any objections, state them at length, and indicate the improvements you suggest.

64. Have you any objections to the existing regulations governing the export and import of these drugs or of their preparations from and into your province, or their transport within the province? Give reasons for your answer.

65. In your opinion is the taxation of $\frac{1 \text{ ganja}}{2 \text{ charas}}$ reasonable with reference (a) to each other, (b) to

alcoholic or other intoxicants? Give reasons for any alterations in the amount of taxation of any of these articles which you may suggest.

66. In your opinion is it necessary that there should be different rates of taxation for different kinds of ganja (such as the "flat," "round," and "broken" ganja produced in Bengal), or for ganja grown in different localities? If so, on what principle?

67. Having regard to the ultimate incidence of the tax on the consumer, have you any objections to the present method of taxing $\frac{1 \text{ ganja}}{2 \text{ charas}}$ $\frac{3 \text{ bhang}}{3 \text{ bhang}}$?

68. Are there in your province houses or shops licensed for the sale of these drugs or their preparations where they may be consumed on the premises? What is your view in respect to such houses or shops?

69. Are the wishes of the people consulted or considered in any way before a shop is opened in any locality? What measures are taken for this purpose? Ought local public opinion to be thus considered?

70. Are there any facts regarding the importation or smuggling of hemp drugs from Native States into your province to which you wish to draw attention? Is duty really paid in respect to the ganja and other hemp drugs used? Or is there any general use of untaxed drugs, and by whom?



INDEX

TO

BENGAL AND ASSAM WITNESSES.

No.	Name.	Designation.	Page.
BENGAL.			
1	Hon'ble D. R. Lyall, C.S.I. *	Member, Board of Revenue . . .	1
2	E. V. Westmacott *	Commissioner . . .	6
3	W. H. Grimley *	Ditto . . .	10
4	G. Toynbee †	Ditto . . .	14
5	A. W. B. Power . . .	Ditto . . .	15
6	H. Luttman-Johnson †	Ditto . . .	16
7	P. Nolan *	Ditto . . .	17
8	H. G. Cooke *	Officiating Commissioner . . .	18
9	J. C. Price *	Magistrate and Collector . . .	22
10	F. H. Barrow . . .	Ditto . . .	28
11	F. H. B. Skrine *	Ditto . . .	31
12	A. C. Tute . . .	Ditto . . .	34
13	H. C. Williams †	Ditto . . .	36
14	G. Stevenson †	Ditto . . .	37
15	Hon'ble F. R. S. Collier *	Ditto . . .	38
16	C. R. Marindin *	Ditto . . .	40
17	K. G. Gupta *	Excise Commissioner . . .	44
18	L. Hare . . .	Magistrate and Collector . . .	49
19	G. E. Manisty . . .	Ditto . . .	52
20	J. Kennedy *	Ditto . . .	54
21	T. L. Jenkins *	Ditto . . .	56
22	R. T. Greer . . .	Ditto . . .	60
23	H. F. T. Maguire . . .	Ditto . . .	ib.
24	W. R. Bright . . .	Deputy Commissioner . . .	62
25	Nandakrishna Bose . . .	Officiating Magistrate and Collector . . .	64
26	L. P. Shirres . . .	Ditto . . .	66
27	E. H. C. Walsh †	Ditto . . .	68
28	H. R. H. Cox †	Ditto . . .	70
29	J. H. Bernard . . .	Ditto . . .	71
30	A. E. Harward . . .	Ditto . . .	73
31	Colonel C. H. Garbett . . .	Deputy Commissioner . . .	77
32	C. A. S. Bedford †	Ditto . . .	79
33	R. H. Renny . . .	Ditto . . .	81
34	Rai Nandkishore Das Bahadur †	District Officer . . .	82

* Examined orally.

† Examined orally only.

‡ Summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

No.	Name.	Designation.	Page.
BENGAL—contd.			
35	W. Maxwell	Assistant Magistrate and Collector	84
36	W. C. Taylor *	Special Deputy Collector	85
37	Chunder Narayan Singh	Deputy Collector; Personal Assistant to Commissioner, Bhagalpur Division	88
38	Ram Charan Bose	Deputy Magistrate and Deputy Collector	90
39	Nobin Chunder Sen	Ditto	93
40	E. McL. Smith *	Ditto	94
41	Gopal Chandra Mookerjee	Ditto	97
42	Navin Krishna Banerji	Ditto	98
43	Pran Kumar Das	Deputy Magistrate and Deputy Collector; Personal Assistant to the Commissioner of Burdwan.	100
44	Gobind Chandra Basak	Deputy Magistrate and Deputy Collector.	103
45	Dina Nath D6	Ditto	106
46	Ganendra Nath Pal *	Ditto	107
47	Sarat Chandra Dass †	Ditto	112
48	Ganga Nath Roy	Ditto	ib.
49	Bhairab Nath Palit	Ditto	116
50	Jogendra Nath Bandyopadhyaya	Ditto	118
51	Jaga Mohan Bhattacharjya	Deputy Magistrate and Deputy Collector; Personal Assistant to the Commissioner, Chittagong Division	119
52	Monmohan Chakravarti *	Deputy Magistrate and Deputy Collector.	121
53	Nava Kumar Chakravarti *	Ditto	125
54	Hira Lall Banerjee	Ditto	130
55	Abdus Samad *	Ditto	131
56	Khired Chandra Sen	Ditto	133
57	Gangadhar Ghose	Ditto	135
58	Prokash Chander Roy	Ditto	137
59	Prakash Chandra Singha	Ditto	141
60	Surendra Nath Mazumdar	Ditto	ib.
61	A. K. Ray *	Ditto	145
62	Kanti Bhusban Sen *	Ditto	150
63	Abhilas Chandra Mukerjee	Ditto	157
64	Gobind Chandra Das *	Ditto	175
65	Braja Durlab Hajra	Ditto	188
66	Nobin Chandra Kar *	Ditto	189
67	Rajani Prasad Neogy	Ditto	192
68	Ghulam Lillahi	Ditto	196
69	Suresh Chandra Bal	Ditto	197
70	Brajendra Nath Ray †	Ditto	200
71	Rai Brahma Dutt	Ditto	201

* Examined orally.

† Examined orally only.

No.	Name.	Designation.	Page.
BENGAL—contd.			
72	Banku Behari Dutt	Deputy Magistrate and Deputy Collector	208
73	Narayan Chandra Naik †	Ditto	209
74	Wooma Charan Bose	Deputy Magistrate and Deputy Collector (Manager, Raj Banaili)	210
75	Rasik Lal Ghose	Manager, Court of Wards	212
76	Raja Tenduk	Manager, Government Estate	214
77	Gour Das Bysack	Retired Deputy Collector	ib.
78	W. Sarson	Retired Deputy Magistrate and Deputy Collector	217
79	W. M. Smith	Ditto	ib.
80	Hem Chander Kerr	Ditto	218
81	Kali Das Mukerji	Sub-Deputy Collector	221
82	Jogendra Nath Mozumdar *	Deputy Inspector of Excise	223
83	Dijendro Nath Pal *	Ditto	226
84	Sib Chandra Soor	First Assistant Supervisor of Ganja cul- tivation	230
85	E. R. Henry *	Inspector-General of Police	235
86	W. D. Pratt	District Superintendent of Police	236
87	W. C. Fasson	Ditto	237
88	F. H. Tucker	Ditto	239
89	R. L. Ward *	Ditto	241
90	Mathura Mohan Sirkar	Inspector of Police	246
91	H. P. Wylly †	Government Agent at Keonjhar	247
92	W. R. Ricketts †	Manager, Nilgiri State, Tributary Ma- hals	249
93	Mahamahopadhy Mahesh Chandra Nyayaratna, C.I.E.*	Principal, Government Sanskrit College	251
94	Jadub Chandra Chuckerbutty	Civil and Sessions Judge, Kuch Behar	253
95	Girindra Mohan Chuckerbutty	Munsif	254
96	Sreenath Chatterjee	Cashier, Public Works Department	255
97	Hara Gopal Dutta	Retired Excise Darogha	256
98	Pratapachandra Ghose	Registrar of Calcutta	257
99	Rai Kamalapati Ghosal Bahadur	Pensioner, Sub-Registrar, and Zamindar	261
100	Surgeon-Colonel R. Harvey *	Officiating Inspector-General, Civil Hos- pitals	262
101	Surgeon-Lieutenant-Colonel C. J. W. Meadows †	Civil Surgeon	263
102	Surgeon-Lieutenant-Colonel W. Flood Murray *	Ditto	264
103	Surgeon-Lieutenant-Colonel J. F. P. McConnell*	Professor of Materia Medica, etc., Medi- cal College, Calcutta	266
104	Surgeon-Lieutenant-Colonel A. Crombie *	Surgeon and Superintendent, General Hospital, Calcutta	267
105	Surgeon-Lieutenant-Colonel E. G. Russell *	Civil Surgeon	274
106	Surgeon-Lieutenant-Colonel J. M. Zorab †	Ditto	280
107	Surgeon-Lieutenant-Colonel Russick Lall Dutt †	Offg. ditto	281

* Examined orally.

† Examined orally only.

‡ Summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

No.	Name.	Designation.	Page.
<i>BENGAL—contd.</i>			
108	Surgeon-Lieutenant-Colonel G. Price . . .	Civil Surgeon	282
109	Surgeon-Lieutenant-Colonel E. Bovill * . . .	Ditto	283
110	Surgeon-Major R. Cobb *	Ditto	288
111	Surgeon-Major J. B. Gibbons †	Police Surgeon	293
112	Surgeon-Captain J. H. T. Walsh *	Superintendent, Dallunda Lunatic Asylum	294
113	Surgeon-Captain D. Prain *	Curator of the Herbarium and Librarian, Royal Botanic Garden, Calcutta . . .	303
114	S. J. Manook	Civil Medical Officer	307
115	Dr. C. Banks †	Ditto	308
116	Rai Tara Prosanna Rai Bahadur	Chemical Examiner to the Government of Bengal	ib.
117	Rai Bahadur Kanny Loll Dey, C.I.E. * . . .	Late Chemical Examiner to the Govern- ment of Bengal	310
118	Upendra Nath Sen	Officiating Civil Medical Officer . . .	312
119	Basanta Kumar Sen *	Assistant Surgeon in Civil Medical Charge	313
120	Norendra Nath Gupta	Ditto	314
121	Chuni Lall Dass	Teacher of Medical Jurisprudence and Therapeutics, Dacca Medical School . .	316
122	Preonath Bose	Teacher of Materia Medica and Practical Pharmacy, Dacca	317
123	Devendra Nath Roy *	Teacher of Medical Jurisprudence, Camp- bell Medical School, Calcutta	318
124	Akbar Khan	Assistant Surgeon and Teacher, Temple Medical School, Patna	322
125	Soorja Narain Singh *	Assistant Surgeon	323
126	Nemai Charan Chatterjee	Ditto	327
127	Behari Lal Pal	Ditto	328
128	Hari Mohan Sen *	Ditto	ib.
129	Trailokya Nath Banerji	Civil Hospital Assistant	331
130	Meer Koomar Ally	Ditto	ib.
131	Rames Chandra Sib †	Overseer, Lunatic Asylum	332
132	Durga Dass Lahiri	Medical Practitioner	333
133	Rev. D. Morison	Medical Missionary	334
134	Piyari Sankar Dass Gupta *	Medical Practitioner ; Secretary, Bogra Medical Society	338
135	Kailas Chundra Bose *	Medical Practitioner	341
136	Mohim Chunder Roy	Ditto	344
137	Kedareswar Acharjya	Ditto	345
138	Mahe Chunder Ghose	Ditto	347
139	Dr. Mohammad Sadrul Haq	Ditto	349
140	Trailokya Nath Majumdar †	Ditto	ib.
141	Prasad Das Mallik	Ditto	350

* Examined orally.

† Examined orally only.

‡ Invited to attend at a meeting of the Commission for oral examination, but failed to appear.

No.	Name.	Designation.	Page.
<i>BENGAL—contd.</i>			
142	Nimai Charan Das †	Medical Practitioner	352
143	Tara Nath Bal	Ditto	353
144	Nocoor Chander Banerji	Ditto	355
145	Lukhmy Narain Naik *	Ditto	356
146	Basanta Kumar Roy	Ditto and Zamindar	358
147	Guru Charan Ghose *	Medical Practitioner	ib.
148	Annada Prasanna Ghatak	Ditto	359
149	Rakhal Das Ghose *	Ditto	ib.
150	Durga Nath Chakravarti *	Ditto	361
151	Bijoya Ratna Sen †	Ditto	363
152	Ganga Persad Sen, Kaviratna	Ditto	365
153	Goopes Mohun Roy	Ditto	ib.
154	Piyari Mohan Kaviraj	Ditto	366
155	Binod Lal Sen †	Ditto	367
156	Ram Chander Gupta	Ditto	369
157	Brahme Deo Narain Misra *	Ditto	371
158	Madhab K. Das *	Ditto	373
159	Hon'ble the Maharaja of Gidhour	Zamindar	375
160	Raja Piari Mohan Mukerji, C.S.I.	Ditto	ib.
161	Maharaja Girijanath Roy Bahadur	Ditto	377
162	Raja Mahima Ranjan Roy Chowdhry	Ditto	379
163	Maharaja Bahadur Sir Jotindra Mohun Tagore, K.C.S.I.	Ditto	380
164	Raja Surja Kanta Achariya Bahadur	Ditto	ib.
165	Raja Ranajit Singh	Ditto	382
166	Rai Radha Govinda Rai Sabib Bahadur	Ditto	ib.
167	Rai Bahadur Radha Ballav Chowdhuri *	Ditto	384
168	Rai Tara Persad Mukerjee Bahadur	Ditto	386
169	Hari Krishna Mazumdar	Ditto	ib.
170	Fazl Rabi	Ditto and Dewan to the Nawab of Murshidabad	388
171	Raghunandan Prasad Sinha	Zamindar	ib.
172	Surendra Nath Pal Chaudhuri†	Ditto	390
173	Girjapat Sahai	Ditto	393
174	Radhika Charan Sen	Ditto	394
175	Raghu Nandan Prasad*	Ditto	395
176	Nanda Lal Gossain	Ditto	398
177	Gossain Mohendragir	Ditto	400
178	Kalikieto Sarkar	Ditto	ib.
179	Jagat Kishor Acharjea Chaudhuri	Ditto	402

* Examined orally.

Invited to attend at a meeting of the Commission for oral examination, but failed to appear.

No.	Name.	Designation.	Page.
BENGAL—contd.			
180	Kamaleswari Persad	Zamindar	404
181	Krishna Chandra Rai	Ditto; Government Pensioner	405
182	Bepin Behari Bose	Zamindar	407
183	M. Kazi Rayaz-ud-din Muhammad	Ditto	409
184	Syed Abdul Jabbar	Ditto	411
185	Jogendra Kishore Rai Chaudhuri	Ditto	413
186	Kali Persad Singh	Ditto	415
187	Gopal Singh	Ditto	416
188	Amar Prasad Singha	Ditto	ib.
189	L. H. Mylne	Ditto and Indigo Planter	ib.
190	F. G. Gibson	Indigo Planter	418
191	J. D. Gwilt	Tea Planter	ib.
192	Jno. Rudd Rainey	Proprietor of Khulna Estate	419
193	A. G. M. Wodschow	Assistant Manager, Indigo and Zamindari, Doomur Factory, Purnea	420
194	H. L. Weatherall †	Zamindari Manager	421
195	Gauri Shankar	Manager, Bachour	ib.
196	Sasi Bhusan Roy	Manager, Dubalhati Raj Estate	422
197	H. M. Weatherall	Manager, Nawab's Estate	428
198	Nitya Nanda Dass †	Assistant Temple Manager	429
199	Sashi Bhusan Roy	Chairman, Satkhira Municipality	431
200	Aghore Nath Banerji †	Vice-Chairman, Serampur Municipality	ib.
201	Khettra Moban Basu †	Municipal Vice-Chairman, Puri	433
202	Revd. Prem Chand *	Missionary, B. M. S.	434
203	Revd. W. B. Phillips *	Missionary, London Missionary Society	437
204	Revd. G. C. Dutt *	Missionary	442
205	Rev. J. G. Kerry †	Ditto	445
206	J. Monro, C.B. †	Ditto	ib.
207	Purnendu Narayan Sinha	Pleader and Zamindar	446
208	Mahendra Chandra Mitra	Pleader and Municipal Chairman	447
209	Ram Dhari Lall	Assistant Government Pleader	450
210	Madhava Chandra Chatterjee	Pleader	451
211	Syed Ryaz-ud-din Kazi	Ditto	453
212	Parameswar Dan	Pleader and Vice-Chairman, District Board	455
213	Uma Kanta Ghatak	Government Pleader	456
214	Pundit Rakhal Chunder Tewari	Pleader and Honorary Magistrate	ib.
215	Sasadhar Roy	Ditto	458
216	Jadunath Kanjilal	Pleader	459
217	Beprodas Banerjee †	Pleader, Newspaper Editor, and Municipal Chairman	463

* Examined orally.

† Examined orally only.

‡ Invited to attend at a meeting of the Commission for oral examination, but failed to appear.

No.	Name.	Designation.	Page.
BENGAL—conold.			
218	Nabo Gopal Bose Rai Chowdhuri	Pleader and Talukdar; late Munsif of Nator	467
219	Abinas Chandra Dass*	Pleader	470
220	Anango Mohan Naha	Ditto	473
221	Kailas Chandra Dutta	Ditto	ib.
222	Mohini Mohan Bardhan	Government Pleader	474
223	Tara Nath Chuckerbutty	Ditto	476
224	Amvika Charan Mazumdar †	Pleader and Zamindar	477
225	Bhuvan Mohan Sanyal	Government Pleader	480
226	Amrita Lal Raha	Pleader and Talukdar	483
227	Pares Nath Chatterjee	Pleader	484
228	Jadubans Sahai *	Pleader and Municipal Vice-Chairman	485
229	Gauri Sankar Roy †	Secretary, Cuttack Printing Company	487
230	Guru Dayal Sinha †	Honorary Magistrate, Municipal Commissioner, and Secretary, Total Abstinence Society, Tippera	488
231	Rai Bahadur Rajkumar Sarvadhikari	Secretary, British Indian Association	ib.
232	Umagati Ray	Secretary, Jalpaiguri Branch, Indian Association. Pleader	490
233	Akshay Kumar Maitra †	Secretary, Rajshahi Association; Member, Rajshahi District Board. Pleader.	492
234	A. F. M. Abdur Rahman *	Honorary Secretary Muhammadan Literary Society	500
235	Kamala Kanta Sen	President, Chittagong Association, Zamindar, and Pleader	ib.
236	Purna Chunder Maitra *	Secretary, Faridpur Band of Hope	501
237	Girish Chandra De †	Representative of the Total Abstinence Society of Bhawanipur	503
238	Indian Relief Society, Calcutta*		504
239	Maharaja Doorga Charan Law, C.I.E.	Merchant	509
240	Nitya Nanda Roy	Merchant and Zamindar	ib.
241	Nobin Chandra Sarkar	Wholesale and Retail Vendor of Ganja and Bhang	512
242	Doorga Das Chandra and Annada Prasad Rai †	Bhang Contractor's Gomastas	514
243	Dhani Ram Saha	Excise Vendor	ib.
244	Ram Nidhi Shaha	Ditto	515
245	Prosad Dass Dutt	Zamindar	517
246	Mahendra Nath Roy	Resident of Jessore	518
247	District Board, 24-Parganas (Sub-Committee)		519
248	District Board, Patna		521
249	District Board, Mymensingh (Sub-Committee)		524
250	District Board, Monghyr (Sub-Committee)		525
251	District Board, Arrah		527

* Examined orally.

† Examined orally only.

‡ Invited to attend at a meeting of the Commission for oral examination, but failed to appear.

No.	Name.	Designation.	Page.
	ASSAM.		
1	G. Godfrey *	Commissioner	529
2	J. J. S. Driberg *	Commissioner of Excise	530
3	Major M. A. Gray	Deputy Commissioner	535
4	J. D. Anderson *	Ditto ; Offg. Excise Commissioner	<i>ib.</i>
■	R. B. McCabe †	Deputy Commissioner	538
6	R. S. Greenshields ‡	Ditto	540
7	P. H. O'Brien	Ditto	<i>ib.</i>
8	J. L. Herald	Ditto	<i>ib.</i>
9	E. A. Gait *	Director of Land Records and Agriculture	541
10	G. Gordon *	Deputy Commissioner	543
11	Captain A. E. Woods	Ditto	544
12	C. W. E. Pittar	Offg. ditto	<i>ib.</i>
13	Ishan Chandra Patranavish	Extra Assistant Commissioner	545
14	I. H. W. Dalrymple-Clark *	District Superintendent of Police	546
15	J. T. Rivett-Carnac	Ditto	548
16	E. Muspratt	Ditto	<i>ib.</i>
17	W. D. Abererombie	Ditto	<i>ib.</i>
18	E. C. S. Baker	Ditto	<i>ib.</i>
19	Surgeon-Major J. Mullane *	Civil Surgeon	549
20	Surgeon-Major J. W. U. Macnamara *	Ditto	551
21	Surgeon-Major H. C. Banerji *	Ditto	556
22	Dr. T. D'O. Partridge †	Ditto	559
23	Dr. H. A. Macleod	Civil Medical Officer	560
24	James McNaught	Ditto	<i>ib.</i>
25	Atul Chandra Roy ‡	Assistant Surgeon, Emigration Department	561
26	Baikanta Kumar Nandi	Assistant Surgeon	562
27	Azher Hossein *	Hospital Assistant	563
28	Lachman Pershad	Ditto	564
29	Betha Ram Surma †	Overseer, Lunatic Asylum	565
30	Prasanno Kumar Das	Medical Practitioner	566
31	Krishna Chandra Sanyal §	Ditto	568
32	Maulavi Abdul Kadir	Zamindar and Honorary Magistrate	569
33	F. C. Moran	Tea Planter	570
■	A. Spicer §	Ditto	571
35	John Phillips	Ditto	572
36	W. Skinner	Ditto	573
37	G. A. Dolby	Ditto	574
38	Masder Ali	Pleader	<i>ib.</i>

* Examined orally.

† Examined orally only.

‡ Summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

§ Invited to attend at a meeting of the Commission for oral examination, but failed to appear.

No.	Name.	Designation.	Page.
<i>Assam—concl'd.</i>			
39	Abantinath Datta	Pleader	575
40	Bishun Chandra Chattopadhyaya *	Ditto	577
41	Kamini Kumar Chandra	Ditto	578
42	Gangadhar Sormah	Ditto	580
43	Revd. J. P. Jones †	Missionary	582
44	Haribilash Agarwala	Merchant	583
45	Devi Charan Barua †	Pleader, and Secretary, Jorhat Sarbajanik Sabha	585
46	Lakshmikanta Barkagati *	Secretary, Tezpur Raiyats' Association .	586
47	Radhanath Changakoti *	Secretary, Upper Assam Association, Municipal Commissioner and Member, Local Board, and Printing Press Proprietor	586
48	Jaduram Baruah *	Pensioned Public Works Department Overseer ; Local Board Member .	588

* Examined orally.

† Invited to attend at a meeting of the Commission for oral examination, but failed to appear.



INDIAN HEMP DRUGS COMMISSION.

EVIDENCE OF BENGAL WITNESSES.

1. Evidence of the HON'BLE MR. D. R. LYALL, C.S.I., Member, Board of Revenue, Calcutta.

1. I have been in the service of Government for over 32 years, and have been in charge of the Districts of Dacca, Tippera, Faridpur, Howrah, and the 24-Parganas. I have also been Commissioner of the Dacca, Presidency, Chittagong, and Patna Divisions, and have been also Inspector-General of Police, and now am Member of the Board of Revenue and in charge of Excise. In all these capacities I have had opportunities of obtaining information and have been Administrator of Excise in the districts above named. I never made this branch over to a Deputy Collector, except in the 24-Parganas, and even there I kept administration largely in my own hands.

2. The definitions are those current in Bengal.

3. I know no district in all Bengal in which the hemp plant does not grow spontaneously. Personally I have noticed it most in Champaran and Tippera, but it is common everywhere.

4. See reply to 2.

So far as I know the plant is the same everywhere.

5. See reply to No. 3.

6. Generally scattered, but I have seen also considerable fields of it.

7. (a) Yes, about Naogaon.

(b) No.

(c) Yes, in Bhagalpur and Monghyr chiefly, but also elsewhere to a smaller extent.

(d) To a smaller extent only.

8. There is not much variation. The amount of land cultivated since 1877-78 for ganja is as follows:—

Year	1877-78.	1878-79.	1879-80.	1880-81.	1881-82.	1882-83.	1883-84.
Bighas	2,103	1,446	1,388	2,235	2,861	1,991	2,494
Year	1884-85.	1885-86.	1886-87.	1887-88.	1888-89.	1889-90.	1890-91.
Bighas	2,015	1,361	2,192	1,760	2,433	2,406	2,670
Year	1891-92.	1892-93.					
Bighas	1,316	3,540					

We have no details of the area under bhang cultivation.

9. I can say nothing that is not to be found in Babu Hem Chander Ker and Dr. Prain's reports.

10. Same class as other cultivators.

11. Never; so far as I know.

12. No, it is never so cultivated, so far as I am aware.

13. No man can legally cultivate plants from which intoxicating drugs are produced without a pass from the Collector. These are only given in

the tract round Naogaon in the Districts of Rajshahi, Bogra and Dinajpur.

See reply to 3. I believe ganja could be grown equally well anywhere. It used to be grown in Jessore.

14. (a) Ganja in the parts above designated, the crop being generally six to eight thousand maunds. The highest since 1877-78 is 9,448 maunds in that year, and the lowest 3,768 in the year following. Last year it was 7,575.

(b) None made.

(c) Bhang is chiefly grown in Bhagalpur and Monghyr.

15. I can add nothing to the information given by Dr. Prain.

16. (a) Yes.

(b) Yes.

(c) No. By this reply, I mean that the amount of resin in the wild plant is so small as to be practically of no use as ganja or charas.

17. Not confined to one class.

18. I agree with what Dr. Prain has written on this point. Ganja is absolutely useless, as now kept, after two years. The result of Dr. Prain's experiments will prove whether it will keep under other conditions.

19. Solely for smoking, so far as I have seen.

20. Charas is little used. Ganja is chiefly used by the lower classes, and Bairagies, and such like.

21. What is smoked is the same thing, *i.e.*, the flower and resin whether it comes from flat, round or chur. Round is more used round Calcutta, but in reality there is no difference, and the use of one kind more than another is quite arbitrary.

22. The dealers buy at Amballa chiefly. All that is used is foreign and comes from the hills.

23. I have never seen or known it to be so used, but have heard of it being so used in Orissa.

24. There was not in 1891-92 a single bhang license in the Rajshahi Division. Only 3 in Chittagong, 8 in Dacca, 8 in Orissa, and 9 in Bhagalpur. In the Burdwan Division there were 72, in the Presidency Division 67, in Patna 73, and in Chota Nagpur 33. It is chiefly drunk. I do not think there are classes who eat and do not drink.

25. The consumption of ganja varies little. In the five years, 1875-76 to 1879-80 it averaged 6,778 maunds a year; in the next five years, 5,871; in 1885-86 to 1889-90 it was 6,209, and in the last three years, 5,741. The highest consumption was in

1887-88, 6,550 maunds; and the lowest, in 1892-93, maunds 5,451. This is the amount on which duty was paid. Charas has increased in the last 10 years; but the total sales are only 10 or 12 maunds at most. In 1880-81 811 maunds of bhang were sold against 1,064 in 1891-92. The increase is small.

26. The great bulk of the ganja smokers are habitual moderate consumers. Bairagies and such like are habitual excessive consumers. I should say there were very few of classes (c) and (d).

27. The lower classes in East Bengal, boatmen and such like, nearly all consume ganja moderately. Hindu religious devotees are those who habitually consume in excess, and also Muhammadan debauchees.

28. (a) About a pice worth.

(b) Six or seven times that amount, or even more.

29. (a) Tobacco.

(b) Dhatura.

In the case of (a), it is the ordinary mixture. In the case of (b), it is used as a stimulant and drug.

30. Both in solitude and company, chiefly the latter. It is most used by males. I have not come across any consumption by children.

31. The habit is easily formed and not easy to break off. Looking at the enormous preponderance of moderate habitual smokers, I should say the tendency to develop into excess was small.

32. Ganja and bhang both enter into the Hindu festivals; but on this point natives will give better evidence.

33. Ganja smoking is not held to be respectable; but I do not think there is much feeling against it. Seeing it is used so much by devotees, religious public opinion cannot be against it. Here again native evidence will be best.

34. I do not think the hardship is very great; but my experience is drawn from jails. I refer to moderate consumers. Excessive consumers feel it more.

35. (a) I do not think so.

(b) Certainly.

(c) It could not be enforced without an enormous preventive service and much cost.

(d) and (e) I think the discontent would be great, amounting to a political danger, and that the cry of interference with religion would be raised.

(f) Yes, and to illicit growth of the hemp plant.

36. No. It is the other way, if anything, but not very markedly.

37. I know of no difference.

38. None, so far as I am aware.

39. This is more of a medical question; but I should say smoking was the less harmful.

40. I believe so; but the evidence of native doctors may be taken.

41. I should say yes to all questions. The boatmen of East Bengal use it largely and thrive on it. It is, like most other things, good when not taken in excess. I refer to moderate habitual use. As noted in reply to question 26, few use the drug occasionally.

42. See above.

43. Absolutely so. In this view alcohol renders those under its influence much more offensive than ganja.

44. Ganja smoked in moderation produces appetite and revives the spirits. It does not produce intoxication.

The effect lasts some time. I have never noticed any after-effects in the case of moderate consumption.

45. (a) I do not think so.

(b) I have never seen any instance; but doctors can say.

(c) No, quite the contrary.

(d) Not to my knowledge.

(e) I do not think so.

(f) Immoderate use is said to cause insanity; but I doubt it, else the proportion of insane Bairagies and such like would be greater than it is. I fear ganja is held responsible for more cases of insanity than are really due to it. I never heard of bhang being blamed for insanity. I think ganja affects some men more than others, as I have seen the same man sent time after time to an asylum and always come back.

46. See above. I believe habitual use of bhang is bad for the digestion.

47 and 48. Not to my knowledge.

49. Ganja is certainly so used, also bhang, generally in the form of majum. It seems rather to strengthen existing desires than to be an active aphrodisiac, and for this purpose it is generally mixed with other drugs. A man who uses hemp for this purpose necessarily wears himself out more than he otherwise would do, and in this way it is more injurious.

50. I cannot say if hemp produces impotence.

51. My experience is that most bad characters consume ganja. I hold that in itself ganja does not dispose to crime; but it may strengthen the will to commit crime if it is already there. I do not know that the moderate use of ganja is connected with any particular form of crime.

52. The above applies generally. Men under ganja sometimes commit murder; but it is hard to say how far the ganja is responsible.

53. Generally premeditated. I have known cases of temporary homicidal frenzy.

54. To some extent.

55. Dhatura is generally mixed when drugging is intended. Ganja alone, unless taken to an enormous extent, would not cause complete stupefaction. In fact, I am not sure that alone it would ever do so.

56. See question above. The ordinary ganja smoker does not use dhatura.

57. I know of no such cases.

58 and 59. On the whole it works well, but is capable of improvement.

Ganja.—I think the cultivation is sufficiently controlled, but the preparation and storage arrangements can be improved. The rules contemplate a public gola; but as a fact, there is no public gola for storage, nor, under existing circumstances, would it be possible without enormous expenditure to have a public gola.

In the first place ganja as it is now prepared, the great bulk of it being "flat," takes much room, and in the next place the damage from rats and mice would be very great. As a fact, at present each raiyat's house is a gola for his crop until it is sold, and this is fair, as the crop is the raiyat's property. At present the raiyat sells to a middleman or goladar, and it is only when the sale is complete and the drug is to be removed that the crop comes to the Government gola to be weighed and packed. This goladar is the middleman between the producing raiyat and the retail vendor, and these men make large profits. They are generally also retail vendors, and they are able to exact very high prices from the other retail vendors. These profits, I hold, ought to come into the pockets of Government; and if the experiments made by Dr. Prain turn out successful, it will be very easy for Government to deal with the raiyats and the retail vendors direct.

In dealing with the raiyats I would have Government purchase the crop at once from the raiyats and undertake the preparation in the manner proposed by Dr. Prain (square cakes). The amount of crop varies from 3,768 maunds in 1878-79 and 3,888 in 1885-86 to 9,448 in 1877-78 and 8,982 in 1883-84. I would buy this just as it is cut, and would fix the price yearly according to the harvest, paying higher rates in bad, and lower in good years, with a fixed minimum and maximum, which can be settled from the prices now obtained by the raiyats. The weak point in our opium system is that all the loss of a bad year falls on the raiyats, while Government pays them just as much in the bad year as in a good. If this be done, I take it the area of cultivation could be much reduced. The statistics show that from one to three thousand maunds a year more are grown than are consumed. This is partly destroyed as damaged (about 4 or 5 hundred maunds) and partly never passes out of the raiyat's hands, the demand not being sufficient. This last element of uncertainty to the raiyat would go if Government bought all the crop, and if Dr. Prain's proposals succeed, Government will be able to keep the drug longer without deterioration. After the drug has been bought and pressed, and, if necessary, put up in tins, it should be made over to Collectors on indents, just as opium is now made over, and retail vendors should buy from Collectors direct.

The great bulk of the crop is at present at once removed from the producing district, and Collectors' indents could be arranged so as to continue this custom and secure the immediate removal to the districts of the bulk of the crop, and thus economise gola space at Naogaon. The pressing sheds need not be substantial, as the weather is always fine at the time of the ganja harvest. What I propose would be liked by the cultivators, and by the retail dealers, and Government would at once secure 2 or 3 lakhs of revenue, and would also have a much stronger hold on the distribution and regulation of the sale of the drug. The only men likely to object to it (besides the goladars) are those who hold that Government should have nothing to do with excise and similar matters; but the public gain would in other respects be so great as to justify Government in disregarding their views. So far as I am aware, there is absolutely no desire on the part of any section of the native community to put down the use of ganja and bhang, and even those who generally support Mr. Caine and the views put forward in *Abkari* do not join in this respect.

60. The cultivation is sufficiently controlled.

61. Not produced, but might be.

Charas.—No charas produced in this province is sold or goes into the market; but Chapter VII, pages 16 and 17 of Dr. Prain's report, shows that some is produced but not used, and if the proposals made above are accepted, the 10 per cent. of resin now lost and thrown away will be saved and so much less hemp need be grown. Ganja and charas are really one, and in time, if the question be scientifically followed up, possibly charas will be the only form used.

62. I think it could to some extent.

Bhang.—The rules require that a license should be taken out for the cultivation of the plant for bhang just as much as for ganja; but, as a fact, no such license has ever been taken out, and all that is used is said to grow wild. The fact is that most of the hemp used for bhang is imported from the North-Western Provinces, and only a small amount is grown in the districts of Purnea, Monghyr, and Bhagalpur. The orders issued in Circular No. 6075 of 26th January 1893 were, in my opinion, in accordance with the law, and would by degrees have operated so as to give some control over the cultivation of hemp for bhang; but the Lieutenant-Governor, Sir C. Elliott, did not approve of them, and they were withdrawn. The fact remains that there is hardly a well-to-do native gentleman who has not a few plants of hemp growing somewhere handy, and that if the cultivation or the existence of these was checked, bhang would be purchased in much greater quantities by licensed vendors. I would also press the Collectors of exporting districts to get cultivators to take license. I am opposed to any sudden drastic action, but think gradual systematic pressure would do much.

63. *Vend of drugs*.—I have already said I would knock out the wholesale vendor entirely and make the wholesale business a Government monopoly.

I have nothing to say regarding the retail vend, which seems to me to be sufficiently under regulation.

64. I have no objection to raise.

65. *Taxation of the drugs*.—This is a very difficult question to answer as a whole.

As regards (a), I should say that charas and chur ganja should pay about the same tax as they now do, but that charas might bear a little higher tax than chur ganja as it is purer; but then again it is brought from a great distance. On the whole an equal rate is not unfair, but consumption should be watched. I do not think bhang can be taxed higher than it is, as the result would simply be more illicit cultivation.

As compared with alcohol the taxation is low; but alcohol is at present too highly taxed, and the result is large illicit distillation. I do not think the rate on flat ganja can safely be much raised without danger of illicit cultivation, and it is this that should guide taxation rather than a comparison with alcohol. As stimulants they can hardly be compared.

66. Yes. Dr. Prain has gone into this in Chapter X of his report, and the Board have since recommended that the rates from 1st January next shall be Rs. 6 for flat (large twigs), Rs. 7 and annas 4 for flat (small twigs), Rs. 7 and annas 8 for round, and Rs. 9 for chur.

67. *Incidence of tax on consumer*.—The tax is undoubtedly light, and it is the cheapest form of stimulant; but, looking at it in all lights, I

am not disposed to recommend much of a rise,—*vide* what has been said under question 65.

68. There is no bar to consumption on the premises, and I see no reason why there should be. A ganja shop has no repulsive surroundings, nor do men get drunk and disorderly as a rule from its use. I know no objections to the present system.

69. Sites of shops are determined under the rules contained in section II, page 101, and sequel of the Manual. Rule 9 is the most important and should be consulted, also Rule 12. Any objection is considered, but no attempt at a plebiscite or anything of that kind is made.

70. The importation from Gurjat into Orissa is provided for in the rules. There is also smuggling, but this is a question of prevention.

Oral evidence.

Question 3.—I have seen the so-called wild hemp growing at a distance from habitations in the Tippera district and in Champaran. There may have been habitations previously in those places, especially in Tippera. I am not prepared to say whether the plant is indigenous or no. I have not had the same opportunities of speaking about other districts than those mentioned above. It would be difficult to eradicate such growth, but the attempt has not yet been fairly made, and I do not think it would be impossible.

Question 7.—There is no licit cultivation in British territory in Orissa, but I believe the plant is cultivated outside in Native States.

Question 44.—In the second paragraph of this answer I mean that after the immediate effects of moderate consumption had worn off I have not noticed any subsequent effects. I have had no moderate consumer under observation, so as to be able to speak to the remote after-effects.

Question 45.—In writing my answer regarding the re-admission of ganja lunatics, I had in my mind particularly the case of a man in the Dacca Asylum, of which I was for many years a visitor, who was admitted not less than six or seven times. I do not remember any other case of the kind.

Question 46.—In saying that the habitual use of bhang is bad for the digestion, I am stating the impression that is left on my mind by what natives have told me. I am referring to the habitual excessive use of the drug.

Question 51.—The opinion given in this answer is largely based on opinions arrived at by Dr. Wise, who made experiments with the drugs when he was Civil Surgeon of Dacca. My meaning is that hemp would intensify a desire in a man's mind to commit a certain crime. Dr. Wise collected evidence from which he concluded that hemp strengthened a man's desires, criminal or other. I have tried to get Dr. Wise's notes, but am sorry I failed to do so. I can give no examples to illustrate my answers Nos. 52 and 53. They convey a general impression, and I cannot recall any individual case. It is a long time since I had to do with magisterial work.

Question 58.—The present system is briefly as follows. A license to cultivate is given to any raiyat who applies to do so within the ganja mahal. The area to be cultivated is entered in the license and in the Government register, and there is no limit

by rule to such area. So far as I know, the Collector never refuses to grant license for any area applied for. The cultivation is inspected by supervisors throughout the period of growth, the areas cultivated being compared with the licenses. The cultivator cuts his crop, not necessarily under the supervisor's eye, nor does he require to get permission, but he gives three days' notice of his intention to cut. The manufacture is done by the raiyat at his own option as to time and place. The supervisors move about and supervise the manufacture as far as they can. Practically, the bulk of the manufacture is not completed under the supervisors' eye. When the manufacture is complete the raiyat carries his produce to his own store, under the latter part of Rule 11 of Section XX of the Excise Manual, page 120, there being no public godown large enough to receive the whole crop. A license is given to the raiyat describing the quantity and kind of ganja he is allowed to store, and authorizes him to keep it until he disposes of it to a licensed purchaser. The amount is arrived at by the supervisors by inspection of the crop after manufacture and the number of bundles into which it is manufactured. The crop is made up by the raiyat into two-seer bundles, and by long practice the measurement is wonderfully exact, though it is done by guess. The raiyat's store is generally situated close to his manufacturing ground. The wholesale dealer comes to the mahal armed with a license from the Collector of his own district giving the amount he is authorized to export. He makes his own arrangement with the raiyats, visiting any store he likes, and as far as I know, unaccompanied by a supervisor or any Excise officer. Having made his bargain, the dealer brings the ganja to the Government gola, where it is weighed and the sale recorded on the back of the raiyat's license, as well as in the Government books. No pass is required for the removal of the ganja from the raiyat's store to the Government gola. The dealers' consignment is sealed at the Government gola and then carried by the wholesale dealer under pass to his gola at the head-quarters or sub-division of the place of import. There it is placed under double lock, one being in the possession of the dealer and the other in the possession of the Excise Deputy Collector. The wholesale dealer sells to the retail vendor at his own price and the retail vendor sells to the public at his own price, except in one district, where a maximum limit is imposed under the terms of an arrangement with the monopolist. This district is Cuttack. The right of retail vend is sold by auction.

I think that this system gives opportunity for illicit disposal of the ganja, but I do not believe that smuggling does occur. It is difficult to give the grounds of this belief, but one at least is that I have never come across a case of smuggled ganja, though cases of opium smuggling are not uncommon. I admit, however, that excised opium is identifiable and the possession of crude opium is punishable, whereas excised ganja cannot be distinguished from smuggled ganja so as to secure punishment. By excised opium I mean the cake. The facility afforded for smuggling is undoubtedly a weak part of our system, though, as I have said before, I do not believe that smuggling prevails to any extent. The safeguards against illicit practices are the concentration of the area of growth, and the crop estimate made by the supervisors when the crop is in the ground. This estimate is generally found to agree wonderfully with the outturn, and forms one check on the

amount of the stuff in the custody of the raiyat. The bulkiness of ganja is an additional safeguard as compared with opium. We have never within my knowledge discovered a cultivator disposing of his crop illegally. Of course, if there were collusion between the protective establishment and the cultivators, this safeguard would be of little use, but as a fact I believe the establishment is trustworthy.

The public gain to which I refer at the close of this answer consists in the financial gain and the removal of facilities for smuggling. I wish to add that since writing this answer the line taken by the anti-opiumists on the Opium Commission has greatly strengthened my view as to the weakness of the opposition to Government establishing a monopoly in ganja. At first we were prepared to bring forward strong evidence as regards the working of the monopoly system as regards opium. But within very few days of the opening of the Commission the anti-opiumists intimated that if the growth of opium were not entirely prohibited they considered the Government monopoly as the best and most restrictive system under which it could be grown. In Bengal the financial benefits to be gained by Government assuming the monopoly would be very great. Only the other day the Excise Commissioner found the wholesale vendor at Balasore selling ganja at the price of Rs. 3 per seer to the retail vendors, and the price there is occasionally as high as Rs. 4, while his expenses could not possibly exceed Re. 1 per seer. This occurs more or less all over the province. The wholesale vendor pays a fee of Rs. 2 for each license.

I should say that there would be distinctly less difficulty in the way of Government undertaking this monopoly than in the case of opium, on account of the limited area in which the drug is grown. The main difficulty would be the bulkiness of the crop, which would be greatly reduced if Dr. Prain's experiments turned out successful. I will place the Commission in possession of the result* of Dr. Prain's experiments so far as they will be available in March 1894 (page 22 of Dr. Prain's report). I do not think the quality of ganja varies so much as that of opium, but it is true that the latter can be accurately ascertained, whereas at present the former cannot. It is possible that if Government undertook the monopoly they would be able by chemical experiment to gauge the quality of ganja. The quality of ganja does not vary so much as opium from field to field, but does vary from harvest to harvest. Crops of inferior ganja do sometimes occur, and people do make complaints. This would be a difficulty in the way of fixing a price, but not an insuperable difficulty. It would not be so easy to fix a price according to standard as in the case of opium. The difficulty caused by the deterioration of the drug is distinctly more serious than in the case of opium, but we hope that Dr. Prain's experiments will enable us to discover a remedy for this. At present all ganja is destroyed after two years. My principal object in proposing the monopoly is to get the maximum of revenue with the minimum of consumption and to benefit the cultivators. At present a large share of the revenue goes into the pockets of the middlemen. Further,

* See Appendix to Dr. Prain's evidence.

Government is unable to fix any sliding scale of price for districts where smuggling is impossible or easy, as is done in the case of opium. The price of opium in the consuming districts is Rs. 16, rising to Rs. 32 per seer in the more distant and inaccessible districts. If Government purchased the ganja crop the cultivator would have a sure market and not suffer the occasional losses he does at present. Government would of course have to regulate the area of land for which licenses should be given and not issue licenses, as at present, to all who apply.

At present the price of the crop is fixed by the ordinary rules of the market, and all risks on account of the crop are taken by the cultivator and to a less degree by the middlemen. The arrangements of the market are all made by the wholesale goladar (middleman). Government is then saved a great deal of trouble and risk in regard to the custody of the crop, the fixing of the price, and the transport of the drug. At the same time I think this relief is too dearly bought.

The system of fixing a price at which the wholesale vendors should be bound to supply retail vendors and auctioning the right of wholesale vend would to a certain extent meet the difficulty by giving a share of the goladar's profit to Government, and would also be of advantage in enabling the retail vendor to know what he was contracting for; but I doubt if the system would result in much financial gain on account of the limited competition among goladars and probable combination among them. As the head of excise I should much prefer to take up a Government monopoly and would guarantee to work it.

Question 62.—I should have preferred that the circular No. 6075 of 26th January had stood. It never had a fair trial. I do not think there would have been any considerable oppression, because the people would very soon give up cultivating if they knew it would lead to prosecution. In some few cases, no doubt, prosecutions would have had to be instituted. But, as far as I know, none were instituted as long as the circular was in force, and should have been prepared to repress any undue activity of this kind. The quantity of bhang that is now exported from the Bhagalpur Division shows that there must be cultivation to a considerable extent, though there is no licensed cultivation. The theory is that the whole of this is wild hemp.

Question 68.—Consumption on the premises is not general though it is not illegal. I know of no evil arising from the practice, and see no reason why it should be prohibited. Nothing has come to my notice to lead me to suppose that any harm arises from it.

Question 69.—The number of shops has been greatly reduced of late years, as statistics will show. Further reduction would cause great discomfort to consumers, and I think they have a right to be considered. I am not prepared to say whether an appeal to public opinion would result in the closing of many more shops. The smoking of ganja is not unpopular.

The people of Bengal are distinctly a sober people, and I do not see any need to interfere further with their habits in regard to the consumption of the hemp drug. I do not think the monopoly I have advocated would be such interference.

**2. Evidence of MR. E. V. WESTMACOTT, Commissioner, Presidency Division ;
late Commissioner of Excise, Bengal.**

1. Thirty years' experience as a Revenue Officer, including four years as Commissioner of Excise.

2. Not all the male plants are destroyed, but as many as possible. There are seeded plants in every sample.

The definitions are correct. Bhang is known as siddhi or bhang. I do not remember meeting with the names of subji or patti, but they are applicable.

3. I think it grows in most Bengal districts. I frequently meet with it. In Nadia I have recently specially noticed it; also in Murshidabad.

4. Generally ganja or bhang. So far as I know there is only one plant.

5. I cannot say. Lower Bengal seems to suit it well.

6. I should say dense. I sometimes see a single plant, but have more often seen it growing in a fairly dense patch, covering up to several hundred square feet.

7. The only admitted cultivation is ganja in the Naogaon sub-division. I believe, however, that so-called wild bhang is really often cultivated.

8. This can be obtained from figures in the office of the Board of Revenue.

9. See Watt's Dictionary. I can add nothing to it. Prain may have got more information.

10. Same classes, I think. Ask Collector of Rajshahi.

11. I believe not. Ask at Naogaon.

12. I think not. The plant in the Gurjat mahals is not much better than bhang, but is used for smoking. I doubt whether much care is taken about extirpating the male.

13. (a) Naogaon sub-division and neighbouring tracts. I do not know why selected.

(b) I do not know. I should think all Bengal would be suitable.

(c) Not that I know of.

14. This is answered in the annual report by the Commissioner of Excise.

15. For the preparation of ganja see Watt's Dictionary. It is smoked with tobacco. Half a tola will last a smoker three or four days. For the preparation of bhang, the information noted by Mr. Fraser at Naihati is correct, so far as I know.

16. (a) I am not sure about this.

(b) Yes.

(c) No.

17. No particular class that I know of.

18. All of them deteriorate. Ganja and bhang lose their effect in time. I am not sure about charas. By the time the new crop comes into the ware-houses, last year's ganja is not worth much. Damp, I should say, causes deterioration. It gets mouldy. Air-tight cases, of course, delay deterioration. I never tried oven-drying. I should think it would destroy the flavour.

19. I believe only for smoking.

20. I can only say that I do not think ganja is much smoked by the educated classes, except in isolated instances. Charas seems most used where there is a Shiya Muhammadan population (Murshidabad), but there are also a number of Jains there.

I don't know who the consumers are. I should say ganja is most used by the laborious classes on the mud soil.

21. I don't think there is any preference. I have inquired about it, and think consumers seem content to take whatever it best pays the trader to import.

22. See annual excise report.

23. Very little, I fancy. Generally used as a drink.

24. All Hindus drink bhang at the Durga Puja. It is also taken (1) medicinally, (2) as a mild, slightly intoxicating, stimulant by all classes in Bengal, but more on the mud than on drier formations.

25. I doubt there being either increase or decrease. High prices affect consumption; but official figures are affected by the success of detective operations, and if smuggling were completely stopped, figures of consumption would undoubtedly go up.

26. This is a difficult question. I should say 75 per cent. or more came under class (a), perhaps as much as 95 per cent. The number under (b), (c), (d), I should say, was very small indeed.

27. Consumers of class (a), I should say, belonged mainly to the laborious classes, agricultural and aquatic, on the mud soils.

Classes (c) and (d) I should look for among professional harlots and town badmashes. As to (b), I am doubtful. I should think an occasional isolated case might occur in any class, even the highest.

28. (a) For the answer to (a), see Mr. Fraser's notes taken at Naihati.

(b) I cannot say; such cases are rare.

29. The Naihati notes give all I know.

30. (a) I should say the habit was just that of native tobacco-smokers.

(b) Males over forty.

(c) Most unusual. I should call such an instance extraordinary.

31. (a) I believe so. It meets a natural craving for some kind of stimulant on the mud soil.

(b) I should suppose so. (c) I do not think so. A man may very well be a moderate consumer all his life.

32. (a) Drinking bhang by Hindus at Durga Puja. See Naihati notes.

(b) Yes.

(c) Temperate.

(d) Not in the least.

There is further use of it in worshipping Mahadeo (Hor-Gouri, Siva), but I cannot give details.

33. (a), (b) Among the agricultural and boat-ing classes it is an ordinary thing, and unobjectionable for a man to take to ganja at middle age; but among the more effeminate classes, the Babus, a man, and especially a young man, who takes to ganja would be looked on as going to the devil, though not so much as if he smoked madak. I should look on such a young man, if a ward of mine, as on a most depraved course. It is not worse than any other wanton intoxication.

(c) I do not know.

34. (a) It would be a wicked thing to deprive hardworking men, much exposed to weather, on the mud soil, of their stimulant. Whether opium or liquor could be substituted for it I can't say; but there is a natural healthy craving for a stimulant, and ganja seems to suit them best. On the drier soils they drink fermented or distilled liquors in preference. Price, however, affects this. Among the Babus, ganja smoking is a vice, and it would not hurt them to give it up.

(c) I cannot.

35. Prohibition quite feasible; but it would require an army of detectives to enforce it. The drug would undoubtedly be consumed illicitly. Prohibition could not be enforced without such a staff as we could not possibly pay for. We should want a man in every village, and then could not trust him. The discontent among consumers would be enormous, as I think the illicit article cultivated and prepared secretly would be most inferior, while producing quite as strong effects if used in sufficient quantities, as its cheapness would make possible and easy. Whether such discontent would amount to a political danger would depend on the strength of the administration. It would do so in a district under a native magistrate, but not in a district properly officered, where the magistrate had his police in hand. Even in the latter case, I could not say that it would not be dangerous that there should be such discontent among the masses as there would be in an eastern (mainly Muhammadan) district.

The prohibition would undoubtedly be followed by recourse to other stimulants; but I should expect to find a general attempt to improve the cultivation of the so-called wild bhang and to make ganja of it. This could be done in every backyard in the country.

36. Not at present. We have increased the taxation on alcohol to such an absurd extent in the mud districts that people have taken to ganja more than they otherwise would.

37. I do not know.

38. I believe no difference whatever.

39. Smoking is more intoxicating than drinking bhang; but, where used in moderation, I should not say that consumers get intoxicated at all—only exhilarated and stimulated. A man can smoke ganja, and go about his work and have a healthy appetite.

40. (a) Decoction of bhang is often given, I believe, as a mild stimulant. It warms the circulation and brightens the eyes.

(b) I don't know.

41. (a) I should think so.

(b) I am certain of it. I have seen it again and again.

(c) I certainly think so.

(d) I don't know.

I speak of moderate habitual smoking of ganja by laborious men past middle age living a life of exposure on a mud soil.

42. I think it beneficial under such conditions. With a lot of effeminate Babus who never exert themselves or use their muscles, it is neither beneficial nor harmless.

43. Quite.

44. (b) Yes.

(c) No.

(d) Yes.

(e) No.

(f) As long as the effect on a moderate European of a glass of beer and a pipe.

(g) No.

(h) Yes, I should say there is a craving when the usual time for a smoke comes round.

45. I speak of the habitual moderate use only.

(a), (b), (c), (d), (e) I should say not in the least.

(f) No.

(g) I leave this to doctors; but I do not believe in insanity produced by moderate habitual smoking.

46. This is quite different. A badmash ganja smoker is equal to any devilry, and I daresay insanity is often caused in such cases. Such a man is probably a debauchee in other ways. His vice does not originate in ganja smoking, but may be stimulated by it.

47. No.

48. I cannot give instances; I should expect to find the habit hereditary, and the children injuriously affected.

49. I do not know. A man who smokes ganja with a woman is just as likely to drink a bottle of spirits—I can't say whether as an aphrodisiac or only as part of his spree.

50. He would probably have a head next morning, and would be more likely to smoke excessively than in moderation.

51. I should say that moderate consumption has no connection with crime whatever; but I cannot give statistics as to ganja smoking among criminals.

52. I should expect to find excessive ganja smokers among regular town badmashes, but I cannot give facts.

53 and 54. I do not at this moment remember a case but I have an impression that there are such cases.

55. Never, I think. They would probably use dhatura.

56 and 57. I don't know.

58. I think it works well. I have thought of substituting a system of buying up ganja by Government on the principle of the Opium Department; but I do not think it would be a success.

59. I think it works fairly well.

60. I think we do fairly well; but I should like to know what Dr. Prain suggests. No improvement in the system has occurred to me.

61. Not produced.

62. Certainly. I am not sure if it would be feasible. I have done a little towards extirpation of the wild plant, but am very doubtful of success. It grows everywhere, and we have no preventive agency to speak of. Police and Excise Officers are told to destroy the plant when they see it and warn the cultivator, and if a man so warned were found with the plant on his land again, I should presume an intention of cultivating and not an accident.

63. I think we do fairly well.

64. No, we do pretty well. All I want is more men, and those honest!

65. The taxation is high enough, but that on alcohol is excessive. Ganja is now the cheaper of the two, but I would not raise the taxation. I would rather lower the absurd taxation on alcohol.

66. There is only one locality. I am inclined to think that all ganja might pay the maximum tax. I do not see why flat ganja should go into

the market with a quantity of wood, and even that in gol ganja is unnecessarily large.

67. No, I think it works well.

68. I do not remember any consumption on licensed premises, and do not think any such accommodation is required.

69. I think it is rubbish consulting local public opinion. It generally means only consulting a number of Babus, who are out of all sympathy with other classes, and utterly ignorant and careless of their requirements.

70. The smuggling of Gurjat ganja into Orissa and elsewhere is very great. You should look up the papers in the Excise Office: otherwise I think most of the ganja consumed really does pay duty. If it were easy to evade the tax, the astute traders would not pay it to the extent they do now.

Oral evidence.

Question 1.—I have been in the service since January 1863. For four years I was Commissioner of Excise. I have served in all parts of the Province, except Behar and Orissa.

Questions 3 and 7.—I think the plants come up from self-sown seed. I have never seen it away from habitations, and that points to its being propagated by human agency. I have spent a great deal of time in the jungles, and have been in the habit of observing plants, but I have never noticed the hemp plant in jungles. The self-sown plant differs very materially in appearance from the cultivated plant, and I believe that the plant grows with different appearance in different parts of India and Europe, though all are botanically the same. The Gurjat plant differs both from the cultivated and self-sown plant of Bengal. I do not think the flowering parts of the self-sown plant contain so much of the resinous quality as the cultivated plant does. I do not think much pleasure could be derived from smoking the produce of the self-sown plant, though it may have been to some extent taken care of.

Questions 20 and 33.—Recent inquiries make me doubt whether the cultivating classes use ganja much.

Question 34.—Recent inquiries lead me to think that the preference of people in the mud tracts for ganja is almost entirely due to its cheapness.

Question 36.—By the phrase "absurd extent" I mean that the price has been raised to such a figure that the poorer people cannot afford to buy it. I should have expected an increase of ganja in consequence of the rise of the price of liquor. There is undoubtedly some smuggling, and the statistics do not, therefore, show the full consumption of ganja.

At Chuadanga I found that the charges which the retail dealer had to pay on one seer of ganja were—

	Rs.	A.	P.
Government tax	7	8	0
License fee	12	0	0
To warehouse-man	2	0	0
TOTAL	21	8	0

The price of a seer of a ganja was Rs. 30, leaving a profit of Rs. 8-8, out of which rent and other expenses had to be met. I do not consider this profit unreasonable. It shows, however, that a margin is left for further taxation, especially as in this case the license fee was excessive. In this view I would modify my answer to question 65 though I still hold that alcohol is taxed too highly.

Comparing opium, liquor and ganja, the last gives the largest profit at present. I found at

Chuadanga that the contractor was making no apparent profit on his opium.

The figures given above regarding the charges on ganja are confirmed by inquiry made at other places. Rs. 30 per seer is the average retail price in Nadia and Jessore. The retail license vendor in bidding for his license is at a disadvantage in not knowing the price he will have to pay to the wholesale dealer, which varies immensely, and I drew attention to this matter in para. 8 of my letter No. 6601, dated 23rd March 1891.

Question 46.—The badmash ganja smoker corresponds to the habitual drunkard in England. He is not merely an excessive consumer of ganja like a bairagi, but is addicted to other vices, and ganja-smoking is only one of the conditions of his life. I have never seen a moderate smoker in the act of smoking as far as I remember, at least I never ascertained that it was ganja which was being smoked. I must have seen my boatmen smoking, but cannot say it was ganja. I have not seen excessive smokers smoking. I do not know how a moderate smoker is to be distinguished from an excessive smoker.

Question 55.—My general experience of police cases formed the basis of my answers. I have never received a report of drugging by ganja.

Question 58.—My views on this question are contained in a letter from myself as Commissioner of Excise, No. 6601, dated 23rd March 1891, and I adhere to those views. With reference to these representations and my answer to question 66, I desire to say that Dr. Prain's experiments in preparing caked ganja seem to have to a great extent met the difficulty of obtaining uniformity in the quality of ganja. I certainly think it would be a good thing to get rid of the wood portion of ganja. I can see no difficulty in it, and do not know why this defect has been tolerated. I remember dismissing an excise clerk who allowed the dealers to remove the wood of flat ganja and pay duty for flat ganja, thereby defrauding the revenue.

Question 59.—By management on the lines of the Opium Department, Government might acquire the profit which is now made by the wholesale dealers. I have not considered the bonded warehouse system, and am not prepared to say whether under that system the same profit could be secured to Government. Theoretically our present system is the bonded warehouse system. Mr. Price, the Commissioner of Rajshahi, will be able to explain why this system has not been provided in practice, and the cultivator has been allowed in every case to store his own ganja. The principal reason is that he is able to look after his produce under the present system. The cultivator has to take out a license to cultivate and a license to store, but there is no weighing before the produce goes into the store. A rough crop estimate only is made. My impression is that the ganja remains in the cultivator's possession from February to May, but there is nothing in the system to prevent its remaining as long as the cultivator pleases. I do not remember how the cultivator is called to account for the amount estimated to have been stored in his gola. Mr. Price can give this information. The system does afford facilities for smuggling, but I do not think smuggling can be very extensive, for, as I have stated in answer to question 70, the dealers would not in that case submit to the heavy taxation. One dealer would inform against another. Smuggling or illicit use by the cultivators themselves would not be checked by this consideration.

Question 62.—I issued the Circular No. 6075, dated 26th January 1893 (attached) with the object of extirpating the self-sown plant, and to bring bhang under taxation. Ganja was not contemplated in the measure. I still think that order might be carried out without any greater amount of oppression than generally accompanies Government interference. I think it would be more common to find the self-sown plant growing on unoccupied lands than upon occupied lands. There are many cases in which the raiyats could not be held responsible for its growth, as when it grows on unoccupied spaces between houses and the river frontage, or on the sites of deserted habitations. The plant could undoubtedly be extirpated from occupied lands.

Question 68.—I see no advantage in licensing consumption on the premises. I do not see why a man should not smoke his ganja where he likes. There might be objection to Government licensing places where people get intoxicated. I object to the prohibition of smoking chandu and madak on licensed premises, because the chandu and madak which is smoked in unlicensed premises pays no tax beyond the opium duty, and some does not pay that. We lose the tax on the license for selling. I should not think that it had resulted in an increase of the practice.

Question 69.—By Babus I mean those known in Bengal as the *bhadralok*, comprising pleaders and school-masters in great part. My remarks do not apply to zamindars, who would not come forward and give an opinion in the matter of local option, but I should undoubtedly go to them if anxious to find out what the local public opinion was. There would be no difficulty in getting public opinion in the villages, for it would be ascertained from the "pradhans" or principal raiyats; but in towns the division between classes is such that there is no homogeneous public opinion, if I may use the phrase.

As far as I have seen the effects of the use of the hemp drugs in Bengal, I certainly see no reason to advocate prohibition nor any restriction beyond that exercised at present. In imposing any enhancement of the present taxation I should have regard simply to the revenue. I should not, however, wish to see the cultivation increased, unless it were a means of counteracting any smuggling which is going on: but I do not think smuggling is carried on to such an extent as to justify such extension.

Since making a closer study of the matter, I have modified the opinions which led me to describe the hemp drugs as "this most pernicious article" in my excise report for the year ending 31st March 1891. I used it at the time as being in accordance with the popular opinion that this drug is the most harmful of intoxicants. Since then I have given more attention to the question, and have come to the conclusion that the habitual moderate use of the drug is not open to objection.

Appendix to MR. WESTMACOTT'S Evidence.

Circular No. 6075, dated Calcutta, the 26th January, 1893.

From—E. V. WESTMACOTT, Esq., Commissioner of
Excise, Bengal,

To The Collector of
Deputy Commissioner

The variety of the hemp drug plant (*Cannabis sativa*), from which the drug variously known as subji, siddhi, or bhang, is prepared, grows wild in many districts in Bengal, and it is not always possible to prove the fact of a person cultivating it, or allowing it to grow on his land, for his own use or for sale. It is desired, therefore, to extirpate the plant as much as possible, so that persons desirous of cultivating it, may take out licenses for doing so. Where the plant is really growing wild on unoccupied land it may not be easy to eradicate it, but where it is found growing upon any part of a raiyat's holding, as is generally the case, any excise or police officer who sees the plant should cause it to be immediately destroyed, and should warn the raiyat of the penalty incurred under section 54, Act VII (B.C.) of 1878, for promoting the cultivation in any way. The fact of such warning should be regularly recorded, and if the plant is found again on the land of a man who has been warned, it may fairly be presumed that he has allowed it to grow, and he may be prosecuted.

I have the honour to request that you will instruct excise and police officers accordingly, and direct your Excise Deputy Collector to keep a register of all the persons on whose land the plant has been found, and who have been warned of the penalty for growing it.

Circular No. 1566, dated Calcutta, the 14th June, 1893.

From—K. G. GUPTA, Esq., Commissioner of Excise,
Bengal,

To The Collector of
Deputy Commissioner

I have the honour to say that the attempt to extirpate wild ganja or bhang seems to the Lieutenant-Governor to be impracticable, and likely to have no result except petty oppression. Sir Charles Elliott accordingly desires that it may be abandoned. I beg, therefore, to request that you will consider my predecessor's Circular No. 6075, dated the 26th January 1893, as cancelled.

3. Evidence* of MR. W. H. GRIMLEY, Commissioner of Chota Nagpur.

I am a member of the Indian Civil Service of more than thirty years' standing, and have been posted to nine different districts in various official capacities, besides holding special appointments, which necessitated my travelling about in nearly every district in Lower Bengal. I was for a few months Magistrate and Collector of Rajshahi, the district in which ganja is grown under Government supervision, but during my brief stay there I had no occasion to visit Naogaon, where the cultivation is carried on, though I am well acquainted with the system. I was for many years Secretary to the Board of Revenue, and had there special opportunities of becoming acquainted with matters connected with the revenue administration of the hemp drugs.

Ganja, bhang or siddhi, and charas are narcotic products of the hemp plant, *Cannabis sativa*. Ganja consists of the resin-coated flowering tops of the cultivated unfertilized female plant; bhang or siddhi is the name applied to the dried or mature leaves, and is usually gathered from the plant in a wild state; charas is the resin which is collected from the unseeded plant while it is growing. The plant in its wild state does not produce ganja. It is cultivated for the sake of the narcotic property which is due to a resinous substance secreted both in the leaf and the flowers. This exudation is collected in various ways. In Nepal it is gathered by the hand. In Sind and Central India men wearing leathern aprons run through the hemp fields, but in some places they oil their bodies and run naked. In Persia it is pressed on to coarse cloths and afterwards scraped off. The use of ganja, while permitted by the Hindu religion to some, is denied to others, and amongst its votaries the narcotic is known by as many seductive terms as are wont to be applied to beverages of American origin, such, for example, as "the conqueror," "the all-conquering," "the dispenser of happiness," "the quick pleasure-giver," "love-dagger," "rose-pillow," "wife of the dhatura or thorn apple," "cementer of friendship," "delighter," and "ambrosia of the gods,"—epithets expressive of the qualities peculiar to ganja according to popular belief. For revenue purposes there are three recognized varieties of ganja, namely, chapta or chipta (pressed or flat), gol (round), and chur (broken), which are liable to a duty of Rs. 6, Rs. 7-4, and Rs. 8 per seer, respectively. Flat ganja is trampled down by the feet in the process of preparation, while round ganja is carefully rolled and has a less quantity of the twig than flat; chur consists of the broken particles of resinous matter that fall off in the manipulation.

The hemp plant is said to grow spontaneously in Bhagalpur and Monghyr, and also in the Bettiah sub-division of the district of Champaran. Occasionally a few plants are to be found on the Burway plateau, a distant portion of the Lohardaga district, bordering on the Native States of Jashpur and Sirguja. It grows sparsely in some of the Native States under me, and is also to be found in the south of the Manbhum district, in Singhbhum, and in the Mohurbhanj State. It is grown best on light, rich alluvial soils with a moderate amount of moisture. The sandy banks of rivers are favourable to its growth, and it thrives well on the "sithi," or refuse of indigo vats. There is no regular cultivation. In

some of the Tributary States people smoking ganja grow the plant at their doors according to their requirements for smoking and drinking, but this is done only on a small scale. In the districts of this division the products of the hemp plant are obtained from Rajshahi. There is no special treatment. The plants are allowed to grow according to nature. There are no regular cultivators.

There are nine Native States under me—Sirguja, Udaipur, Gangpur, Jashpur, Bonai, Korai, Changbhakal (which are tributary), Serai-kela and Khasawan (which are political). The growth, where it exists, is found near the houses of the people, a plant looked after for a man's own consumption. Whether there are plants in the jungle I cannot say. I have never looked for them. I do not know the growing plant. I believe that what the people produce is all consumed in the Native States. I had one complaint from Sambalpur—but only one in five years—as to smuggling ganja into British territory. It was on a small scale. But, on the other hand, the Raja of this very State (Gangpur) applied for permission to import ganja, about five or six months ago. I gave the vendor (through the Raja) permission to import from Sambalpur on the line of rail. I do not think the Raja knew anything about the difference between Bengal and Central Provinces ganja. These States manage their own excise. The inhabitants generally do not take ganja, as they do not manufacture it to any extent. They have no surplus to export.

For smoking purposes the amount of care and manipulation bestowed on the preparation varies with the taste and means of the purchasers. A common method, where a smoke is wanted quickly, is to break off a bit of the chur or broken ganja, and after adding a smaller quantity of tobacco leaf, to mix the two together on the palm of the left hand by rubbing them with the fingers and thumb of the right hand, a few drops of water being applied to give consistency to the whole. After being pressed into a compact shape, the mixture is again broken up and separated and put into a chillum, a small pellet of stone or some other hard substance being placed at the bottom to prevent choking of the stem. The chillum is only a few inches long, and a light being applied, the smoker holds the lower part to his mouth and draws the smoke by quick inspirations into his lungs, and then slowly emits the fumes, while he passes on the pipe to his companions, a single pipeful, costing a pice or half a pice, being made to do service for half a dozen persons. A more careful method of preparation is to pick out the small leaves and flowers and discard the leave-stalks. These are pounded on the left hand by the thumb of the right, water being applied, to promote adherence, and after being strained through a cloth, the ganja is chopped upon a board and mixed with fine tobacco leaves in the proportion of two or three to one to suit the taste of the smoker. Those moderate smokers, who prefer it strong, add no tobacco. Instead of a piece of stone, a plug of tobacco may be inserted in the chillum to prevent the clogging up of the stem. For eating, bhang or siddhi is prepared as a confection, and is called majum. It is mixed with water and boiled down to a quarter of the original quantity, and, with the addition of atar of roses, ghee, syrup, and cream, is warmed into a kind of

* This statement was read to the Commission by Mr. Grimley, a few verbal additions being made to it at the time.

toffy, which is cut up into small slices for sale. For drinking, the leaves are pounded up small and mixed with water, pepper and other spices being added to give a flavour; the concoction is drunk with sugar and milk. In order to preserve the leaves of bhang, they are first dried in the sun, and then boiled in the milk and water and again dried. Charas is also used for smoking. Being glutinous, a quantity of tobacco is placed around it to make it burn in the chillum when lighted.

Bhang can be prepared from the hemp plant wherever grown, but I am doubtful about ganja. The hemp preparations are made by the consumers and not by the vendors. The drugs deteriorate by keeping, but if kept in air tight or tin-lined boxes deterioration can be prevented. The Raja of the Jashpur Tributary State reports that deterioration can be prevented by covering the drugs with the leaves of the moulán tree.

Ganja and charas are usually smoked. The former is said to be occasionally chewed or eaten and rarely used with spirits. When eaten or chewed, it is used as a medicine for colic or indigestion. It is also used with oil for the cure of itch. It is also given to horses as medicine; and in the work of Raj Bullub Kabiraj it is described as a tonic, as increasing animal heat, and as a cure for leprosy. Bhang is used as a beverage by all classes of people, specially in the hot season, and largely by up-country people. Its use is not confined to any particular locality. It is sometimes eaten with sweetmeats. It is also taken as a medicine for the cure of diarrhoea, dysentery, asthma, and rheumatism in the form of a pill, the leaves being finely ground and mixed with a little water and black-pepper. Sometimes it is taken as a drink by diluting it with mere water. In a Sanskrit work called "Modan Nirghanta," it is described as a cure for coughs and colds, as bitter to the taste, and an astringent. It is further said to increase the appetite and bodily heat, to generate bilious diseases, create nervousness, bewilder and derange the mind, and make a man unnecessarily talkative. Charas is not much in demand in Chota Nagpur. It is said to be used by rich Muhammadans. Ganja is used by all classes of people, but the majority of its consumers belong to the lower classes, such as day-labourers, cartmen, palkibearers, masons, ghasis, domes, bairagies, gosains, jogis, and sanyasis. It is believed to be used throughout the division.

Flat ganja is said to be preferred by the consumers of Hazaribagh and Lohardaga, and round by those of Manbhum and Singhbhum. In Palamau flat and chur ganja are most consumed, but the consumers are said to prefer chur. A glance at the Board of Revenue's Table XI will show that while the metropolitan districts prefer round ganja, the eastern and more western districts have a taste for flat. I have had no opportunity of investigating the reason of this difference, but the difference of climate and race may have something to do with it, and I beg to offer the following suggestive remarks. (1) The eastern districts are damper than other parts of Lower Bengal; (2) there is a preponderance in them of Muhammadan Bengalis as compared with Hindu Bengalis elsewhere. There are certain parganas in Lohardaga, specially known as "The five parganas," owing to certain customs which differentiate them from the rest of the district, and in these parganas, and also in Manbhum, there is a preponderance of Hindu Bengalis as compared with other parts of the division co-existent with a taste for round ganja in preference to flat.

Bhang is sometimes used by poor people and by those who cannot at once smoke ganja. It is used as a substitute for ganja when the latter drug is not easily procurable. The consumers are mainly taken from the following classes:—

- (a) Agriculturists, shopkeepers, artisans, day-labourers, palki-bearers, up-country darwans, athletes, and some people of the richer classes.
- (b) Bairagis, jogis, sanyasis, Brahmins who worship Mahadeba, palki-bearers, porters.
- (c) Young people of dissolute and depraved habits.

People who worship Siva and Rama are addicted to the use of ganja and bhang, asserting that they are enabled thereby to divert their mind from worldly affairs to the meditation on the gods whom they worship. The religious mendicants who use it do so not only as a devotional exercise, but also to render themselves fit to undergo the hardships of their ascetic life, and the inclemency of climate incidental to their prolonged pilgrimages to distant places. It may be here remarked that while the classes above noted are allowed by the Hindu religion to use ganja, the "Shaktas," or followers of the goddess "Shakti," are only permitted to use liquor for devotional purposes, while the Voistabs, or worshippers of Vishnu, are not allowed liquor or ganja. There is a passage in one religious work to the effect that liquor, so far from being used, may not even be smelt. The use of liquor ought to lead to a Brahman being excommunicated, but no degradation necessarily attaches to the use of ganja, and the effects of intoxication are not so openly displayed and offensive to the public as those of ganja.

Majum and charas are beyond the means of the poorer classes. They use ganja and bhang as a tonic or exhilarant. The moderate use of these drugs is considered beneficial, enabling the consumer to bear fatigue, withstand cold, and shake off mental anxieties. Those who worship the god Shib rarely begin to smoke without calling upon his name "Bam Mahadeo" or chanting couplets in praise of ganja, some of which are of the Bacchanalian type:—"How can I recite the virtues of ganja with an alphabet of only thirty-two letters. The consumer of ganja is sanctified, and even the messenger of death flees from him." "Salvation comes from partaking of ganja." "One pipe leaves you as you were: be persuaded, take two; with a third you are a vazir, the fourth a king." The Kulin Brahmins in Eastern Bengal for specific purposes or to serve their private ends, are said to be great consumers of bhang.

The ingredients mixed with the drugs are—

- (a) Ordinarily, tobacco leaves with ganja; and black-pepper, sugar, milk, and cucumber seeds with bhang, in order to reduce the strength and render the mixture more agreeable.
- (b) Exceptionally, dhatura is used with bhang to strengthen the mixture. Aniseed is sometimes used with bhang to cool the mixture. The admixture of sugar with bhang has the effect of increasing its intoxicating powers.

Ganja is used in company; bhang to a certain extent in solitude. Both these drugs are mainly confined to the male sex. The exception is public women, who take some preparation of the drugs both as a stimulant and a solace for the troubles

and cares of their unhappy life. It is not usual for children to consume either of these drugs. The habit of consuming both is, I think, easily formed. It is difficult to break off in the case of ganja. In the case of both the tendency of the habit is to develop into the excessive.

There seems to be no custom, social or religious, regarding the consumption of ganja, but bhang is required to be used by both males and females on the last day of the Durga Puja, after the images have been thrown into the water. The use, however, on this occasion is very moderate, and not at all injurious or likely to lead to the formation of the habit of using the drug. Those unwilling to drink it merely put a drop on their tongue by way of acceptance from the dispenser. The consumption of ganja is generally regarded with dislike, and an inveterate smoker of the drug is always considered a disreputable character. The use of bhang is not considered equally reprehensible. The use of ganja is considered disreputable, because its effects are injurious, both physically and mentally. The custom of worshipping the hemp plant is unknown here; but in the cultivating districts the treader-out of the ganja salute it before commencing operations. A shopkeeper keeps a small branch of ganja in a pot or lota as a sign of his trade, and may be observed to salute it reverentially on opening his shop in the morning, but there is no special sanctity attached to the plant, the practice of making a salaam on opening their stores being common to other shopkeepers.

It would be a serious privation to habitual smokers of ganja if obliged to forego the consumption of the drug, because the habit, when once formed, cannot be easily given up. Not so in the case of bhang. The habit of using it is not so difficult to give up. It is not easy to make a correct or even an approximate estimate of the probable number who would suffer. It would be feasible to prohibit the use in the case of bhang, but not so in that of ganja, the smokers of which will most assuredly resort to the use of dhatura and other drugs of a more virulent character to satisfy their cravings. The prohibition of the use of ganja would cause very serious discontent among the consumers, especially among those every-day toilers who use it as a food-accessory while undergoing fatigue, or as a refreshing pick-me-up when the day's work is done. It cannot be asserted that the discontent consequent on the prohibition will not amount to a political danger. It is, however, almost certain that the prohibition will be followed by recourse to either alcoholic stimulants or other drugs.

The effects of charas smoking are milder than those of smoking ganja. Charas is the rich man's drug, and the man that keeps his body well nourished feels least the effects of any drug. I am aware also that these drugs deteriorate. I believe there is really very little difference between the three preparations of ganja, but round is said by some to cause headache, and to be more effective than flat or "chur" in producing intoxication. Flat ganja is undoubtedly milder, and the drinking preparation of bhang is less injurious than smoking ganja or bhang.

Native physicians use bhang as medicine for diarrhoea, dysentery, asthma, and dyspepsia. Both bhang and ganja are used in the treatment of cattle diseases. Ganja is also prescribed in cases of impotency. As an alleviator of sorrow and anxiety, a black-care-dispeller, a death-scarer, and devil-driver, it is held in high repute. Bhang

is known to be beneficial when used moderately. It makes a person who has a long journey before him indifferent to hunger, thirst, or fatigue. Ganja in moderation is said to be a preventive of disease in malarious and unhealthy tracts. Its use is said to help devotees in concentrating their minds.

It is said to produce a state of ecstasy favourable to religious contemplation, hence its use among bairagies, gosains, and jogis. As a food-accessory or digestive, bhang is used by people suffering from bowel-complaints or dyspepsia. As a staying-power ganja is used by the hardy sons of toil, such as fishermen, boatmen, blacksmiths, shell-cutters, weavers, potters, carpenters, masons, wrestlers, lattials, milkmen, day-labourers, palki-bearers, runners and mendicants. As a preventive of disease, it is used by most people belonging to the lower classes. Ganja is also used by devotees and mendicants. The moderate habitual use is here referred to, and is, I believe, harmless, just as the moderate use of wine, spirits, opium, and tobacco is not injurious, but there is this difference, that the habit once formed of taking ganja, it is an easy step from moderation to excess. The moderate use is refreshing, though it may produce intoxication in a novice. It is said to allay hunger, while bhang is said to increase the appetite. The effects of ganja and charas last from two to three hours, and of bhang from three to six. The after-effects may be headache and giddiness, where the smoker is not well seasoned, and the deprivation of the narcotic occasions uneasiness to an habitual consumer.

I do not think the habitual moderate use of the drugs necessarily produces any noxious effects, physical, mental, or moral, but in the case of ganja, habitual moderate use is not always possible. There is always a tendency to increase the quantity consumed, and the user finds his constitution impaired and digestive powers diminished. Bhang is said to cure dysentery and asthma, but ganja, by injuring the digestive organs, may induce asthma. Like all narcotics it must induce laziness, but it is doubtful if it tends to deaden the intellect or produce insanity, though it may produce excitement amounting to frenzy in a novice smoker, closely resembling the symptoms of acute mania, but this mood changes as the influence of the drug ceases. The habitual excessive use may produce noxious effects, physical, mental and moral. It impairs the constitution, injures the digestive powers, and causes loss of appetite, especially the use of ganja. It is a matter of general belief that the excessive use of ganja causes dysentery, bronchitis, and asthma. It interferes with the free circulation of the blood, nutrition is impeded in consequence, and the smoker presents an anæmic and emaciated appearance, and in short may become the victim to a variety of ills, mental and physical, including insanity. In India insanity is often attributed by the medical faculty to indulgence in ganja. Dr. Wise, the Superintendent of the Lunatic Asylum in Dacca in 1871, reported an increase in the number of lunatics who were previously smokers of ganja. In November 1846 out of 198 inmates in the asylum, only 45, or 22·7 per cent., were ganja smokers. Between 1850 and 1859, among 980 admissions, 406, or 41·4 per cent., were known to be smokers, and between 1860 and 1867, among 2,522 insane persons treated, 1,145, or 45·4 per cent., had their insanity referred to this cause; but in dealing

with these figures, we must endeavour to guard against the *post hoc ergo propter hoc* method of reasoning. It is difficult to procure accurate antecedents of lunatics. All that may be known is that they have been accustomed to smoke ganja, but the exact bearing of smoking on insanity has never been precisely determined. According to Rai Kanny Lal Dey, Bahadur, of 2,283 cases admitted in the Bengal lunatic asylums during the five years ending 1887, 878, or 38·4 per cent., were attributed to this cause. In the opinion, however, of Dr. Lyon many of these cases were simply cases of temporary intoxication from *cannabis*. Chevers remarks that "it is a matter of popular notoriety both in Bengal and the North-West Provinces that persons intoxicated with ganja are liable to commit acts of homicidal violence." Dr. Grieve, Surgeon-General of British Guiana, wrote in November 1882, when he was Director of Lunatic Asylums there:—"Whilst in the case of the majority of Creole patients admitted to the asylum, the production of the disease can be fairly assigned to indulgence in alcohol; amongst the coolies alcohol plays but a secondary part as a cause of insanity. With them Indian hemp is the poison from the effects of which the patients suffer." Quite recently, while inspecting the Ranchi jail, the case of a man came under my own observation who was being released just as I entered the jail. It appeared he was admitted there in October last as an alleged lunatic to be kept under observation and treatment. He was in an extremely excited condition, talking incessantly day and night. For the first few days he never slept, but sang and talked throughout the night. He had pleasant hallucinations. He complained of constant hunger, but would take no food. His body was covered with numerous superficial abrasions, on which he was in the habit of rubbing dry earth. After about two months' treatment he gradually improved, and was able to stand his trial on a charge of paddy-cutting, and was convicted. Enquiries into his previous history, both from himself and others, have elicited the fact that for some years previously he was in the habit of smoking ganja, and that for a short time before he came to jail he had considerably increased the quantity, and he himself thought that his temporary insanity was brought on by the excessive use of ganja.

I do not think that any large proportion of bad characters are habitual moderate consumers, but a person of the criminal class, who is in the habit of taking ganja, may resort to it before starting on a criminal expedition to brace up his energies. Excessive use of ganja is believed to lead to crime. It brings a man into disrepute, and when once a man is known as a reprobate, the transition to crime is speedy. Excessive indulgence in ganja is said to incite to unpremeditated crime and to lead to temporary homicidal frenzy. The only case of the kind that has come before me in my personal experience was the following:—A man, a resident of a Political State under my control, was recently tried by me for the unpremeditated murder of a child in a fit of frenzy. He snatched it up in the street, ran away with it, and cut its head clean off with his axe. The possession of the axe did not denote premeditation, for in the jungly locality in question men carry axes as freely as we use walking sticks. He was said to be a ganja smoker, and while admitting the crime could give no account of why he did it. He had not, however, the appearance of an excessive ganja smoker, was mild in manner, and generally sorry

for the deed, but as regards the incidents of commission his mind was a blank, "Why should I," he pathetically observed, "kill? I never did such a thing before, but as they say I did it, I suppose I must have." It was impossible for me to decide whether the crime was due to ganja. The man was in his senses when tried, but had been temporarily insane when he committed the crime. He was acquitted on this ground and sent to the asylum. I did not come to a finding either as to whether he was a ganja smoker or as to whether the crime was connected with ganja. The case coming up from a Chief would be very defective in accurate details. The man admitted that he smoked ganja, but there was no evidence that ganja had anything to do with the offence.

Ganja smoked without the admixture of tobacco causes an irritating sensation in the throat and induces violent coughing. Bhang used with black-pepper, anise, and seeds of cucumber is said to have a cooling effect. Sugar used with bhang enhances its intoxicating power. The admixture of dhatura with ganja and bhang greatly enhances their intoxicating power. No information is available regarding the admixture of dhatura for personal consumption or for administration to others. Ganja eaten does not produce intoxication as rapidly as when it is smoked.

The present system of excise administration is working well. There is no cultivation in this division. The system in force for controlling the cultivation and preparation in Bajshahi, where the hemp plant is cultivated, is, in my opinion, working well and requires no modification. Already different rates for taxation exist. Taxation should be, as it is now, regulated according to the quantity of the drug from which intoxication is produced in a given quantity of each kind of the drug. This is, I believe, the principle now followed in imposing duty on the different kinds of ganja used. I have heard it contended that because it costs more to get intoxicated from country spirits than hemp drugs, the duty on the latter should be levelled up, but this would be a mistaken policy, as many of the regular consumers of ganja are too poor to purchase country liquor. A recent report of the Protector of Immigrants in Trinidad attributes the increase of crime there to ganja and drink, and refers to the fact that in 1885 an ordinance was passed requiring the payment of as much as £100 per acre of a license to grow ganja. This prohibitive rate, I observe, led to the smuggling of ganja from Venezuela, seven miles off on the mainland, and there can be no doubt that any prohibitive fees and duties introduced in India would have a like result. The wishes of the people are consulted before a shop is opened. Inspecting officers hold local enquiries and submit reports before proposals for the opening of new shops are made. Local public opinion is always considered, and should be considered. Smuggling from Native States on a small scale occasionally takes place and may escape detection, though no complaints on the subject have reached me. Duty is paid in respect of the ganja and other hemp drugs used. The use of untaxed drugs is extremely rare in this division.

In saying I have had no complaints, I except the complaint from Sambalpur already referred to. This complaint did not come to me direct for me to take up and deal with. It was to the best of my belief a representation made by the Central Provinces to the Bengal Government, which came to me through the Board for report.

The memorandum submitted with my letter No. 404-P., dated 13th January 1894, contains one possible inaccuracy to which I wish to draw attention. It states that there is now nowhere in the Tributary States any shop for the sale of hemp drugs. A license was given by me a few months ago, as I have said, to a vendor in the Gangpur State to import ganja. Of course I cannot definitely say that the shop has been opened yet. The statement that there are no shops is based on reports received from the States.

As to Mr. Hewitt's order I am not prepared to say that the Rajas keep the lists he prescribed. But I think the spirit of the order is carried out. I think the Chiefs are very loyal and willing to

do what they are told in regard to such matters.

Speaking generally, my remarks regarding the use and effects of the drug in its various forms are based to some extent on personal experience, on records, on conversations with people, on the information I acquired as Secretary to the Board for example, and on enquiries I have made from persons whom I believed to be able to give me valuable information. I have seen men smoke and had them prepare their ganja before me to show me how they did it. I have also examined golas and shops. So I am not without experience. I have also in the rivers of Eastern Bengal seen the good effects which boatmen and fishermen attribute to the drugs.

4. Evidence of MR. G. TOYNBEE, Commissioner, Bhagalpur Division.

Oral evidence.

Including furlough my total service is 28 years, all in Lower Bengal. Out of that I have passed about 10 years in Orissa in all the grades from Assistant Collector to Commissioner. Of my Bengal service I have been for almost equal periods in Bengal Proper, Eastern Bengal and Behar.

I have formed no general opinion of the effects of the drugs, for the use is not common. As well as I can judge, the effects of the drugs are the reverse of favourable. A bearer of mine was said by his fellow-servants to eat ganja, and the effect was temporary insanity. He found his way into the Hughli jail, where he was very filthy in his habits. I cannot say whether he went to the asylum from the jail. He left my service, as he was taken up for theft, and he became insane in jail after a week or two, I believe. I conclude that his insanity was due to ganja, because the servants said he ate it. He had not to my knowledge been mad before. His eyes always had a wild look. He had only been two or three months in my service. My wife said she was afraid of him on account of his wild appearance and peculiar manner. He was only a temporary mate-bearer, and I did not see much of him. I knew nothing of his previous history. This is the only specific instance of the evil effects of the drug which I can give.

As Magistrate and visitor of jails I have formed the general impression that crimes of violence are very frequently attributed to the hemp drugs. This impression is not based on specific knowledge, but on general reports and popular rumour.

I do not remember coming across any cases of ganja consumers except the one I have described, and in that it was the servants' statement only. The consumption of ganja has not been a fact which intruded itself upon me, so that I cannot point to any person and say he is a consumer. I have never had persons pointed out to me as social wrecks from the effects of ganja.

On the other hand I have known several cases in which I was certain of the use of alcohol, and I remember for certain dismissing at least one clerk for repeated intemperance. I think I have dismissed more. I have seen many careers among my clerks wrecked through indulgence in alcohol. I am only referring to cases of natives, and these

were frequently of good social position. As far as I have seen, many more cases of evil effects from alcohol than from hemp have come before me. The effects of the former seem to be more on the surface.

The hemp plant is, I believe, universally grown in the Gurjat Mahals. I have only made one tour in these tracts, which lasted three months. I saw the plant growing near houses, but cannot say whether it was cultivated or had sprung up of itself. I have never seen it away from the villages. I could not say for certain whether the plant is used in the hill tracts. But I have heard that it is used medicinally in a decoction made from the plant in the green state. I have never heard of its being used for cattle. It is sold into the Mogalbandi. The fact that the plant is found near the houses, and not found in the jungles, points to its being either cultivated or sprung from seed thrown aside by consumers. It is not grown in fields, but five or six plants may be found in almost every village. This amount of growth is more than would be required for the alleged medicinal use, and I doubt if all the drug is used medicinally. I believe it is collected in centres and sold into British territory, most probably by the Rajas or their underlings, certainly not without the Rajas' consent. I do not think it is much used by the people themselves. About three years ago we tried to get the Rajas to agree to allow the drug to be exported under regular supervision, and a set of rules was drawn up for the purpose. These rules must have been subsequent to the Bengal Government Resolution No. E. $\frac{1-9}{2}$ 4 of 6th September 1889. Some of the Rajas did adopt the rules, which were an amicable arrangement between the Rajas and the Superintendent of the Tributary States, and some temporized. These did not say "no," but did not adopt the rules. These rules were framed in pursuance of a policy which Government have no doubt approved, but, as far as I know, they were not sanctioned by Government. The origin of this action was, as I remember, that after the abolition of prohibition under the orders of September 1889, the Excise Commissioner complained of the flagrant smuggling which was being carried on from the States into the British territory.

The Excise officers were constantly complaining of the smuggling, but I could not say the extent to which it was carried on. The complaints were never-ceasing.

Regarding the orders issued by the Bengal Government in September 1889, it was no doubt a mistake in fact to suppose that the Gurjat ganja was used entirely or mainly as a drink; but I do not think there was any mistake in the policy of that Resolution, because, though the Superintendent reported that the prohibition had been enforced in eleven of the States, I do not believe that the enforcement was more than nominal. Even if a Raja agreed to prohibit, I do not believe he would carry out the arrangement. Therefore, believing this, though I have no personal knowledge of what had occurred before 1890, I think that no real progress had been made. If I heard that greater success had attended similar prohibition in States of the Central Provinces, I should attribute it to the better supervision exercised in the Central Provinces, owing to the fact that they have a Political Agent who is much more in touch with the Rajas than the Superintendent of the Tributary Mahals can possibly be. I believe also that the Central Provinces Government exercises stricter supervision and more severe control over the proceedings of the Rajas than the Bengal Government allows the Superintendent to do. I understand that the Commissioner in the Central Provinces has authority to send for a Raja and reprimand and warn him regarding the misgovernment of his State; whereas on our side this is not allowed, except in cases of open revolt. In my opinion, if the Government is to secure the Rajas against revolt as the consequence of misgovernment, there ought to be greater powers of supervision and control than there are at present. With these greater powers in the hands of the Superintendent the Rajas would be more amenable to advice. And any advice which the Chiefs affected to accept, and any orders issued in accordance therewith, would also be much more easily given effect to and carried out if there were a political officer appointed to visit the States and be in constant touch with them as the Superintendent, Tributary Mahals, cannot possibly be.

In excise matters the Rajas would become more amenable if such an arrangement were made. And as regards ganja, all that would be necessary would be to get the Rajas to order all the ganja intended for export to British territory to be brought together into a central depôt and to be sent only under pass. Such ganja would be subjected to an adequate duty on entering British territory. I should not interfere with internal consumption at all. The Raja would then be responsible that ganja was not exported from his

territory without pass, that is to say, he would issue orders against any export except through the gola, and he would punish any attempt to evade such order. A smuggler would render himself liable to punishment by his own Raja and the co-operation of the Raja would be secured. If this were effectually carried out, it would be sufficient.

If the Rajas would agree to prohibit cultivation and accept our ganja, receiving the duty themselves, as in the Central Provinces, that would be a better and simpler solution of the matter.

The effect of the decision of the High Court and the Secretary of State declaring the Gurjat States to be foreign territory has been followed by the repeal of the Regulations which were previously in force. On the matters provided for by Regulation, *e.g.*, succession and settlement of boundary disputes, executive orders have been substituted, and no practical change in the relations between the Rajas and the Superintendent has taken place, except that the Superintendent's authority has been weakened owing to the necessity for referring everything to Government. With regard to excise, there was no law or regulation in force in the States. The position of the Government in excise matters in relation to the States is affected by the Secretary of State's decision, inasmuch as the authority of the Superintendent has been weakened, and inasmuch as the Rajas are more independent in their tone. I cannot say whether it has actually been altered: that will depend on the terms of the sanads which are under consideration. So far as I remember, there is no special reference to excise matter in the proposed sanads, but they define generally the relations between Government and the Rajas.

I see no objection to the introduction of Rajshahi ganja into the States if the Gurjat ganja is prohibited. I am not prepared to say that I approve the opening of shops where none now exist. I have not formed any opinion as to the comparative strength and effects of the Rajshahi and Gurjat drugs. The introduction of a system of ganja excise involving the establishment of shops would tend to the reduction of consumption if the native drug were prohibited. There is no limit to the amount of their own ganja which the people of the Gurjats can obtain at present. I doubt if the opening of shops would increase consumption even if the drug supplied were of superior quality, because the inhabitants of the Gurjats are satisfied with the commonest kinds of drugs and other articles.

5. Evidence of MR. A. W. B. POWER, Commissioner, Burdwan Division.

As regards myself, I regret to say that I am not sufficiently acquainted with the subject to be able to give a personal opinion of value, and would prefer not to hazard any generalization on the evidence which has been collected. All I would remark is that during a varied mufassal experience extending over 26 years, the evils arising from excessive use of ganja came prominently to my notice only in one isolated instance, some fifteen years

ago, where temporary insanity accompanied with violence was ascribed to that cause; but I cannot now remember whether the supposition was verified.

With regard to public associations, I beg to state that the Collectors in this division have not discovered the existence of any public association willing to adduce evidence in the matter. In fact there is no association in this division which deals with such subjects.

6. *Evidence of MR. H. LUTTMAN-JOHNSON, Commissioner of Dacca.*

Oral evidence.

I came out in December 1867, and have served in Bengal, Behar and Assam. I was only a year in Behar, and have chiefly experience of Assam and Bengal. Sylhet and Cachar are much the same as Eastern Bengal, though part of Assam. The Brahmaputra Valley practically constitutes Assam as contrasted with Bengal. I have been Secretary to the Chief Commissioner when he managed excise direct, and have also been Commissioner of the Brahmaputra Valley; so I have considerable experience of the Assam side of the question.

The problem may be viewed for Eastern Bengal and Sylhet and Cachar together on the one hand, and for the Assam Valley on the other hand.

I have seen the hemp plant wild in Sylhet, Cachar, and Mymensingh, and all the districts of the Assam Valley and the Khasia hills; and I know it grows wild in the Naga Hills and Bhutan, because it is smuggled down. I should say that the wild growth is from seed accidentally sown. I judge this from its situation. I have seen it near villages in bunches and so on, but not actually in the jungles of Cachar or Assam. I have seen it rather in connection with habitations than in jungles; and I judge, therefore, that it grows from seed of imported ganja. I find that this view is stated in the last Excise Report for Assam. I have noticed it most in the waste spaces, especially near villages on the Grand Trunk Road through Assam in the Nowgong district, in tobacco fields in a village near Korabandar Ghat in the Kamrup district, and last cold weather, when out shooting in Mymensingh, I found twenty or thirty acres of it (more or less thick) in Thana Durgapur. These instances occur to me at present. But I have seen many other instances. In these cases I did not think it had been intentionally sown. I asked about it. The people said it was jungly, grown up of itself, and that they did not use it for anything.

I have known of illicit cultivation in Assam. There were a good many cases discovered in the Golaghat sub-division and also in the Dibrugarh country.

The cultivation was, as a rule, only of a few plants. In the Dibrugarh case there was not ganja by the acre, but there were many plants. All the people of the village seemed to be cultivating. I have not known any systematic cultivation on a large scale; but agricultural cultivation generally is much scattered in Assam; and I have known cases of cultivation of ganja on a small scale being discovered in remote places. I fancy the reason I do not remember many cases in Sylhet and Cachar is because we did not make any great effort to stop it or pay much attention to it. It is since I left that greater efforts have been made to stop unlicensed cultivation.

In my opinion the prohibition of cultivation of ganja is effective both in Bengal and Assam. I think it has been effective without much harassing of the people. But you have only to stir up the police with a circular and hope of reward to give trouble. The cultivation which exists is trifling; but, on the other hand, a little ganja goes a long way. Cases of illicit growth are not very common; the cases that do occur often turn

out not to be cases of cultivation, but merely accidental growth. Complaints by licensed vendors are very rare. The wild plant is not used for ganja, but the leaf is used for bhang. The ganja from the cultivation of the wild plant would be very inferior. I must have seen ganja produced from this wild growth; but I cannot recall a case. I know no case of ganja prepared from the wild plant without cultivation. But I have seen it smoked. We experimented with it; it was not anything like excise ganja, but poor stuff. My general conclusion is that it is not feasible—not possible without giving the chance of oppression—nor necessary to prohibit bhang. It is specially difficult in Bengal, where the want of Revenue establishment makes us so dependent on the police in such matters. In Assam it would be possible, though even there there would be great difficulty.

My experience in regard to the effects of ganja on the health of the people is too limited to enable me to give any information. The number of people who take it in any quantity must be very small as compared with the people who take a decoction of bhang. I have never had opportunity of observing cases. I think the people, if asked, would say that smoking ganja to any great extent was bad, but that taking bhang was much better. They would regard alcohol as worse. That is generally my view, as I must base my view on what I hear. I cannot, from personal observation, say anything definite. I cannot, I fear, give instances of connection between hemp drugs and insanity; but I think that if I had the records of the Courts of the Brahmaputra valley before me I should be able to show cases of violence traced to ganja. It has to be borne in mind, however, that ganja is often used as a false plea to get men off capital punishment. I have for the last fifteen months in this Dacca division (which of course I remember better than the more remote Assam experience) had all the special police reports showing all serious crime; and I do not remember any case of the connection of crime and hemp drugs.

I do not think there is any possibility of total prohibition in the case of bhang. But I think that ganja cultivation might be prohibited so that the people might take to bhang, as I believe they would. I do not think there is a case for prohibiting ganja owing to the limited number of consumers, and bhang does little harm. Ganja is reputed to do so much harm that if it were widely used it should perhaps be prohibited if possible. One is, however, brought so little among the people that I have little chance of any personal knowledge of the subject. But the opinion of the people is against ganja; the tradition has come down against it; I even learned before I came out to this country that hashish was a terrible thing, and I have seen nothing to show me the contrary. Opium consumers come to see us, and we can talk to them about the drug. It is not so with ganja. Your *syce* may take the drug, but you could not tell about its effect on him. So one has nothing on which to base any judgment of one's own in the matter. I am not in favour of prohibition, because so few use ganja; and my opinion regarding its effects can only be based on hearsay and reading and not on personal experience.

I cannot say whether ganja or alcohol is more connected with crime. But my experience leads me to say that in the Assam Valley districts it will be found that both these intoxicants are sometimes associated with crime, especially in tea gardens.

There has been considerable increase in the taxation of ganja both here and in Assam. I do not think the limit has been reached. I cannot

say precisely how the taxation of ganja compares with that of other intoxicants. But I think it could still be increased. I have, however, no definite proposals to make.

I do not think there is much smuggling of excise ganja. Government keeps careful watch over stuff kept in the local golas, of which Government keeps one of the keys.

7. Evidence of MR. P. NOLAN, Commissioner, Rajshahi Division.

There can be no doubt that the practice of smoking ganja is regarded with disfavour by the upper classes of this division, while drinking bhang on certain occasions is among them an honoured custom. The distinction thus made does not, however, rest on an impartial judgment formed after a full investigation of the effects of the two practices. The extent to which ganja may be injurious is not at present known, and we must trust to the present inquiry to elicit the real facts. Ganja smoking is despised by the well-to-do, because its consumption is confined to the poor who can afford no other indulgence, just as drinking gin in a public house is looked down on by gentlemen who take champagne and liquors in clubs. But the sentiment is stronger here, for in this land of caste, more than any other, the well-to-do feel a repulsion for any food or stimulant used exclusively by those beneath them in the social scale. Opium is certainly more injurious than ganja, and yet its use excites no such aversion, as it is taken by the rich. Apart from this class prejudice, that is among the working classes themselves, there is no more antipathy to ganja, than there is, in England, to strong tobacco. It is regarded as a form of smoking.

It would probably be possible to put a stop to the supply of ganja, as the crop cannot easily be grown without observation. But the use of bhang cannot be prevented, because the plant grows wild everywhere. There are many forms of self-indulgence open to abuse; and it is a question for investigation whether men inclined to intemperance, when stopped from using a particular drug, will not take to some other evil practice.

Oral evidence.

Question 1.—I have been 26 years in the Service, and have served in Bengal, Behar and Orissa.

Question 33.—My statement that opium is certainly more injurious than ganja is based on observation and what I have heard. I have not studied the returns of lunatic asylums. I could generally tell an opium taker, but I could not tell a ganja taker. I understand that eating opium is much worse than smoking the same drug.

Question 35.—The wild plant grows abundantly, certainly over the whole division of Rajshahi, and there is enough of it all over the province to poison the whole population in twenty-four hours, if taken in the form of bhang in strong decoction. Smoking might injure a man, but could not poison him in so short a time. I believe that the practice of drinking bhang is very limited in extent. I have known a man to become temporarily mad after a dose of bhang, but I have seen no such effect from smoking ganja. I put in a statement* which shows calculations in support of my

view that the use of the drug distributed over the population is very small. As regards the comparative effects of bhang and ganja, I am only able to make one deduction from my observation, viz., that a man is much more likely to do himself harm by one debauch of bhang than by a similar indulgence in ganja. I compare the relative effects of drinking bhang and smoking ganja to the relative effects of drinking alcohol and smoking tobacco. The instance I have mentioned is the only one which has come to my notice of the evil effects of bhang. I have never known death to follow from bhang drinking.

I have no very decided opinion on the question of prohibiting the drugs. If the consumption is small as I hold it to be, the difficulty of prohibiting would also be small. And though I have never seen any evil effects of ganja, they may exist notwithstanding.

I should like to draw attention to one detail of the present system of levying the duty on ganja. It is a sound fiscal principle that duties should be levied at as late a stage as possible. The duty on ganja exported to the North-Western Provinces is paid at Naogaon. It ought to be levied at bonded ware-houses in the North-Western Provinces, as is done in Bengal.

Further, originally in this province there used to be several centres of production. These were all concentrated at Naogaon. This has been found to be an excellent measure, of which the advantages are—

- (1) economy of establishment;
- (2) diminution in smuggling: wherever there is cultivation there is smuggling;
- (3) improvement in quality of the produce by one cultivator learning from another;
- (4) uniformity of taxation.

The question arises, should this system not be extended by having one single centre for all India, as in the case of opium, or at least for all Upper India, including the Central Provinces.

Cost of carriage is a main objection to concentration, but this does not enter very largely into the matter of ganja from its high value in proportion to weight. The duty alone on round ganja is Rs290 a maund, to which has to be added the intrinsic value of the drug.

The Commission of course would have to select a suitable centre. But there is no doubt that the area for production could easily be supplied. The area under cultivation in Bengal is trifling, viz., 800 acres yielding 8,000 maunds of ganja. Experience shows that this amount could easily be doubled, and I have no doubt that the wants of all India could thus be supplied from Naogaon without any great increase in cost of establishment.

* Appendix to Mr. Nolan's evidence.

I have not studied the question of production or cultivation in other provinces. Nor have I considered the question of prohibiting production elsewhere than at the centre. But the experience of Bengal shows this to be feasible.

I do not express any opinion at present as to total prohibition. That is the question now under trial before the Commission.

I have observed a proposal in the replies to the Commission's questions by the officer in charge of the Rajshahi tract, that Government should purchase the ganja from the cultivator, store it, and distribute it to the distant districts where it is consumed. If this proposal is under the serious consideration of the Commission, I desire to record an opinion against it. It would be impossible for Government to purchase from the cultivators as private dealers do. The experience gained by the State in regard to opium, and by planters in regard to indigo shows that when there is only one purchaser in the field, he must make his arrangements before the crop is grown on a system of contract and advances. I do not think it desirable to undertake such a business in regard to a commodity for which there is so little demand, merely for the object of intercepting the moderate profits now made by the wholesale dealers.

The system by which the right of wholesale vend is put up to auction with the condition that the wholesale dealer shall sell to the retail dealer at a fixed price is new to me, and I am not prepared to give an opinion on it at such short notice.

Appendix to MR. NOLAN's evidence.

The consumption of ganja is much smaller than is popularly supposed. All Bengal, Assam, and a part of the North-West Provinces, with a population of about 80,000,000, is supplied from an area of 800 acres, the standard size of a single tea garden. The gross amount grown averages 8,000 maunds a year; but much of this is wasted before issue, so that duty was paid last year on 5,451 maunds only. Even of this a considerable part consists of twigs, separated before consumption, so that the quantity smoked cannot exceed 4,000 maunds. If every one smoked, the allowance a day for the individual would be $\frac{1}{2781}$ part of a tola, or the twelfth part of a grain. At the rate of a tola a day, which tobacco-smokers would think moderate, 36,000 persons would consume all the ganja produced for 80,000,000. It follows from these figures that the habit must be rare or the doses taken homoeopathic, producing no organic effect.

8. Evidence of MR. H. G. COOKE, Officiating Commissioner, Orissa Division.

1. Nineteen years' actual residence in which I have served in 21 districts in Lower Bengal.

2. Yes.

3. I believe in all districts of Bengal, Behar and Orissa.

4. My impression is that it is invariably called ganja in Bengal. Bhang may occur in Behar; but even there, so far as I can recollect, the word ganja is preferred.

5. I know of no conditions necessary to its growth, as it seems to grow throughout the province.

6. Scattered.

7. In the Province of Bengal, there is, of course, the Government factory in the Rajshahi District for purposes (a), (b), and (c). I know nothing of (d).

In Orissa, in that portion of the province that is called the Tributary Mahals, there is no check on the cultivation of ganja, and it doubtless goes on extensively throughout the States.

8. I am aware of none. Owing to the States enjoying an almost independent existence, it is impossible to obtain reliable statistics.

9. I have no personal experience of ganja cultivation, nor have I seen cultivated ganja anywhere in Bengal. Wherever the plant is found it is alleged to be wild, and, I believe, generally is so. No experience in the Tributary States.

10. Ordinary cultivators.

11. I can't say.

12. I should suppose that that is precisely what is done in the Tributary States of Orissa.

I can't say if the male plant is extirpated there. In Bengal, Behar and Orissa, unlicensed cultivation is punishable.

13. (a) Of course in Bengal it is entirely pro-

hibited, except under Government supervision in Rajshahi.

(c). I think not.

14. All under Government supervision in the Rajshahi District.

(a) and (c) Also in the Tributary States of Orissa.

15. I know nothing of the methods of preparation. Ganja is smoked. Siddhi is drunk and sometimes smoked. Charas is smoked.

The ganja that I have seen exposed for sale in the Tributary State of Dhenkanal, appeared to be sun dried.

16. Yes. This is probably the case in Bengal, Behar and Orissa, where its preparation is illegal; but in the Tributary Mahals it is: I have seen it exposed for sale in the bazar.

So far as I know, bhang can be produced from the wild plant; also ganja and charas.

17. I can't say: I have no experience of the ganja-producing area.

18. Undoubtedly all deteriorate, and I believe lose their effect in about one year. I believe damp is the chief cause of deterioration; but under the most favourable circumstances, it deteriorates by lapse of time. A dry well ventilated store-room is believed to be most favourable for its preservation.

19. I know of no other use.

20. In Bengal a very small proportion of the population take ganja, and charas is even less in use.

It is not confined to any class or locality.

21. I have found round ganja is generally preferred; so far as I can recollect, it is almost exclusively used in the prosperous district of Hughli.

22. Excised charas is used in Bengal. I have never heard of charas other than excise charas being used; even in Orissa the drug produced in the Tributary States is not, so far as I am aware, smuggled into Orissa in this form.

23. I have never heard of such a case; but it is alleged to be so in the Excise Manual.

24. The priests of the temple of Jagannath at Puri, and the worshippers, when they visit the shrine, are addicted to the use of bhang.

25. There has been no marked increase or decrease in Orissa; exciseable ganja has been less consumed in Orissa since the restriction on its cultivation in the Gurjat States has been withdrawn; but Gurjat ganja doubtless accounts for this.

26. I am unable to form an estimate.

27. All classes. I find it impossible to say what leads to such a practice: religion is undoubtedly a factor.

28. I do not know.

29. Ordinarily tobacco, ghi, or milk, and sugar in the case of majum and ganja. I have never heard of dhatura being added.

The other ingredients are added to form a confection, add flavour, and increase its strength. I have never heard of bhang massala being sold.

30. In solitude and in company. All drugs are used mainly by the male sex, and chiefly by the middle-aged and old. I believe it to be unknown for children to take any form of the drug.

31. With regard to the use of all forms of the drug, it is believed to be difficult to break off the habit, and there is a tendency for its use to become excessive.

32. I do not know precisely the customs, beyond that Snivite devotees and the priests of Jagannath use ganja and bhang respectively on religious grounds, and that one or the other is consumed by the laity at certain religious festivals, *e. g.*, Bejoy Dasami. The use of the drugs cannot, I think, in this connection be said to be generally excessive; it doubtless would conduce to the formation of the habit in some cases.

33. The habit of taking any of these drugs in excess is regarded with disfavour. I do not think that the feeling extends to their moderate use; it is true the word "ganjari" is opprobrious as applied to an individual, but, I believe, in the same sense that drunkard or sot is similarly applied to those who exceed in strong drink, and is inapplicable to moderate consumers of alcohol. I attribute the sentiment to the evil results of the habit which affects body, mind and morals—wrecking the body, stupefying the mind, and depriving a man of all scruples in obtaining the wherewithal to procure the intoxicant.

34. Undoubtedly. I have no reason beyond the experience of mankind with regard to a favorite indulgence, say in tobacco and alcohol: the cases are precisely similar.

35. (a) Certainly not.

(b) Undoubtedly.

(c) It could not be enforced.

(d) Most serious discontent.

(e) Nothing amounts to a political danger among the inoffensive people of Lower-Bengal; it might be otherwise in other provinces.

(f) This would not be necessary. The ganja would be procured.

36. I see no such reason.

37. I can't say.

38. I believe not; the only difference, so far as I am aware, is that these are each more or less mixed with fibre which, while increasing bulk, does not affect potency.

39. I have never heard so. I have always understood that smoking is the most injurious mode of taking the drug.

40. I can't say beyond that hemp is said to be used by hakims as an aphrodisiac.

I am informed that siddhi enters into a variety of medical prescriptions which are esteemed as valuable.

41.(a) I don't know.

(b) I have heard of ganja being so used.

(c) I don't know.

Palki-bearers thus use ganja moderately and habitually for purpose (b).

42. The effects of the moderate use of any or all of these drugs cannot be very bad, or more cases would come to light of their evil results. In the course of my service in India I do not think that I have seen half-a-dozen cases of the degrading results of these drugs. The few cases I have seen were doubtless cases of excessive use.

43. I believe entirely so.

44. I cannot speak from personal knowledge on any of these points.

45. I have no reason to think so.

46. I have seen a few instances of individuals besotted with what was called ganja, though it might have been any other form of hemp. My observation did not extend to all the points raised. I can only speak to physical appearances: a sleepy lack-lustre eye, black lips, a pale and unwholesome complexion, and a general appearance of dirt and neglect.

47 and 48. I have no reason to think so.

49. (a) I have heard so.

(b) I have not heard of its use by prostitutes.

51. I have no reason to think so.

52. It is alleged that devotion to this habit leads men to steal in order to gratify the propensity. I do not think that it can be alleged that their excessive use can be associated with other forms of crime, except those of violence.

53. Undoubtedly. I believe I am right in saying that lunatic asylums are full of such cases.

54. It is not improbable that they may be used by rioters before a riot; but it would not be easy to prove this.

55. I have never met with a case of the kind.

56 and 57. I have no experience on these points.

58. It is working well, but for the smuggling from the Gurjat States.

59. I do not think that the above defect can be removed, except by greatly strengthening the preventive force.

60 and 61. I have no experience of the details of the Government control over the production of the excisable article.

I do not believe it possible to prevent the production of the hemp plant either wild or otherwise.

62. It is already controlled, as far as possible, in Bengal, Behar and Orissa, though I doubt whether the control is effectual.

In the Gurjats it is uncontrolled, and could not be controlled.

63. I have no objection.

64. None.

65. I believe it to be reasonable.

66. Undoubtedly each class of ganja contains a different proportion of intoxicating properties as compared with its bulk.

Whether Gurjat ganja should be taxed as at present less than Rajshahi appears questionable; but the evidence on the subject is conflicting.

67. None.

68. None in Orissa so far as I am aware.

69. Such are the orders of Government, and I believe that they are obeyed. Excise Officers make local inquiries. I think local opinion should be considered in these matters.

70. The smuggling of ganja from the Tributary Mahals is now under consideration of Government. I believe that it is impracticable to prevent its cultivation owing to the nature of the country, and there are political obstacles to this being done. All that the British Government can do is to prevent its import.

Should any policy of suppressing the use of the hemp drug be adopted, the Tributary States of Orissa will always afford facilities for smuggling, which will, I think, be beyond the power of the British Government to check.

Oral evidence.

Question 1.—I have been Commissioner of Cuttack and Superintendent, Tributary Mahals, since November 1892.

In the Tributary States the relations between them and the Government are contained in treaties, but are somewhat undefined. All are practically alike. There are no such differences, as I have ever found, to affect any question of administration. Measures thought advisable to be carried out are carried out under my advice. In criminal matters we have specific executive orders as to the powers of the Chief. In regard to opium the States have to get their opium from us, and this puts them in our hands in this matter. I know of no orders on the subject. Opium is not grown, and the question has never arisen. If it did, it would be referred to Government. In regard to spirits, we do not allow any State to open any shop within three miles of the border. This is the only order. But we advise them as to their excise administration. In general matters the States profess to follow our advice; but in some cases they do not fully comply, as in the matter of realising fines in criminal cases. In States under management during minorities, my powers are only limited (1) by the consideration that these arrangements are temporary, and (2) by the orders of Government.

I tour in these States regularly. The orders are that the Superintendent shall spend at least two and-a-half months a year in the Tributary Mahals. My remark in answer No. 9, regarding want of experience, refers simply to cultivation. At the time I wrote, I had seen nothing of cultivation. I have seen much more of it since.

Question 19.—I am under the impression that siddhi is used for drinking and ganja for smoking. I have seen in correspondence that heads of ganja are sometimes put in the drinking mixture, but I have no knowledge of this at first hand. I have never seen it.

Question 53.—My answer here is based on what I was told at Dacca. I used to visit the Asylum there, and was informed that ganja led to insanity, and that these lunatics committed crimes of this kind. I do not know of any cases of sane persons being incited by ganja to unpremeditated crime.

Question 62.—In the first part of this answer I mean that there is control over cultivation. Cultivation is prohibited. I have, I remember, acquitted men on the ground that the plant was wild, and I believe that the law is simply that cultivation alone is prohibited. I do not think the prohibition can be effective in view of the enormous area under control. I have (I am quite certain) convicted men for cultivating the plant, though I have never myself seen it cultivated in Bengal. It was always a question as to whether the plant was wild. I could not distinguish between the wild and cultivated plant. I would take evidence as to the circumstances and also the evidence of experienced persons. I am unaware of any Circular having been issued by the Excise Commissioner regarding the extirpation of the wild plant. I may have been at home at the time.

In my answer No. 9, I have said that I have no experience of cultivation in the Tributary States. This was written in October last. I started on tour in November. I have since seen fourteen out of the seventeen States. I think that the plant does not exist except in the *baris*. It certainly is not cultivated in fields. I feel sure that it does not exist except in *baris* (enclosures). I should have seen it if it did. My view is confirmed by that of men like Mr. Wyllie who spent years in the States not touring through them, but residing in them. He says: "There may be some wild growth of ganja; but it must be of a very limited nature, as in all my wanderings I have seen none such, though I have looked for it and asked to be shown it." The Raja of Boad says: "It is rarely found in a wild state." The Manager of Barambha says: "It is never found in a wild state." This is quite in accordance with my experience and opinion. As to the extent of the *bari* cultivation, I cannot give accurate information as to the amount of supply available. The ganja I saw in the market (answers 15 and 16) was undoubtedly grown in *baris*. I do not think it is often sold in the markets, because it is grown in the *baris*, and the people use their own stuff.

There is clearly a margin over and above what the people who grow it use themselves. I have seen it once exposed for sale in Dhenkanal, and it is probably exposed for sale elsewhere. This surplus is available for smuggling. It is smuggled, though I believe more is made of this sometimes than the facts warrant. I have shewn in my answer No. 25 that Gurjat ganja accounts for falling-off in consumption of excise ganja. I have before me the following paragraphs from my predecessor, Mr. Metcalfe's letter No. 204E., dated 9th June 1887:—

"It is perhaps useless to attempt to estimate the amount of ganja actually smuggled, as the data for such estimate are inadequate; yet I may note that the activity of the police and excise staff has caused an increase in consumption of 11

maunds of licit ganja within the past six months; and as this increase has been obtained by simply checking the casual smuggling by pilgrims, it may safely be assumed that, were all smuggling put a stop to, at least 50 maunds of licit ganja would be required to take the place of the ganja now smuggled.

"From the last Excise Administration Report I find that the average consumption of ganja in this district for 1880-1885 was 122 maunds, of which 25 maunds were Gurjati. The stoppage of sale of Gurjati ganja led to a falling-off corresponding to this 25 maunds as in 1885-86; only 105 maunds of licit ganja was consumed, and it may safely be said that the result of the stoppage of the sale was simply to cause an increase in smuggling of 25 maunds a year, and the smuggling trade must be an extensive one if it could increase so as to meet one-fourth of the annual consumption in the course of one year."

I cannot say that Mr. Metcalfe's is an exaggerated estimate; but I cannot see now where so much illicit ganja comes from. I am not able to say how much ganja is grown in the States. I have myself not seen much of it. I should be inclined to accept the opinion of Narayan Chandra Naik as to the extent of the cultivation there at present. He has much experience of these States. He was examined before the Commission yesterday (witness No. 73).

Cultivation of ganja within three miles of our border was prohibited in 1878, and importation of Gurjat ganja in 1882. The former order was withdrawn in 1889, and the latter in 1892. In 1882 there was a jump of thirty maunds in the Cuttack District in the consumption of excise ganja, and there was a marked decrease in 1891-92. The alterations in duty, which occurred meantime (especially in 1887-88 and 1889-90), have to be borne in mind; but the figures undoubtedly point to the extensive use of Gurjat ganja. The districts of Puri and Balasore are said not to be affected by the Gurjat ganja so much as Cuttack. Balasore people are said to prefer Rajshahi ganja. I cannot explain the figures for Puri, which seem to indicate that it is also not affected by Gurjat ganja. I know nothing personally regarding the smuggling into Puri from Madras; but I know there has been much correspondence regarding it.

The smuggling of Gurjat ganja, which is known to exist, certainly requires a remedy. I have considered the matter carefully. I do not think we can expect the States to provide a preventive service. We must do it on our side; nor do I think the Rajas have the establishment or energy to prevent smuggling. I therefore said in my answer No. 59 that the only remedy was to strengthen greatly the preventive force. But, as I have shown in my answer No. 70, this does not appear to me to be a perfectly efficient method. You may do something, but I do not see how over such a border you can hope to succeed. I see no efficient method, except as was done before, going to the fountain-head and getting the Rajas enlisted in our system.

There was a proposal to have a licensing of cultivation in the States by the Rajas and admission of the ganja into British territory as excise ganja under regulations similar to those regarding Rajshahi ganja. I do not think this would succeed. For the success of the plan would depend on the efficiency of the Raja's arrangements.

The third method is to call on the Rajas to prohibit growth, and get them to take their ganja supplies from Government. I was not aware that this has been done in the Feudatory States of the Central Provinces, and that these States are now carrying out this system. I see no difficulty in this proposal except the difficulty of preventing the order of the Raja, or his promise to issue the order, remaining a dead-letter. If the Rajas themselves agree, there is, of course, no objection whatever to the consumer in their States being taxed as consumers are in our territory. But it would have to be considered how far it would be wise politically to tax the excitable tribes, such as Khonds, Bhunyas, and Santhals. I cannot say how far these tribes use the drug. I have not had opportunity of inquiring. In Mohurbhunj, where the prohibition was carried out and excise ganja used, there are many Santhals. This would indicate that there was no difficulty with them. None of the other States that agreed are remarkable for these aboriginal tribes; but they all have them to some degree.

At present the Rajas derive no income from ganja, and there would be no difficulty in this respect. I am prepared to say that I hope "they would be guided very much by our advice;" but I

**Vide* his letter No. 1196, am bound to say that Mr. dated 22nd July 1886.

Metcalfe's* position was stronger than ours is now, since the formal ruling that these States are not British India. I think they would be guided by our advice, but the character of one Chief differs much from another's. I observe, also, that the history of the matter, as

†*Vide* his letter No. 414, shown in Mr. Hopkins'† dated the 1st April 1889. letter, shows the complete willingness of seven chiefs to meet the wishes of Government. There were also four minors at the time. Of the remaining four I am of opinion that the objections (except, perhaps, in the case of Keonjhar) are not *bona fide*. They amounted to a polite evasion of dictation. I think that if the measure were adopted for the majority of States, dissentients might give way in time.

In regard to securing the co-operation of the Chiefs, I see no necessity whatever for any compensation in a lump sum. There is nothing for which we have to compensate them, and we should get nothing in return. But I am strongly in favour of giving the Rajas the ganja at cost price, and letting them receive all the duty. This would make their interest in the matter coincident with ours.

I am aware that the Government of Bengal, in Sir Steuart Bayley's time, abandoned this scheme on the ground that the Gurjat ganja was less deleterious than the Rajshahi drug. This has apparently been admitted to be a mistake of fact. And the action taken is undoubtedly to be regretted. The States had for the most part agreed, and the system had been practically introduced. I am in favour of the system. I am in favour of it mainly from the point of view of our excise. I see no cogent argument in favour of it from the interests of the Gurjat States, as they do not seem to have suffered from their drugs so far as I know. But from the point of view of our excise, and from the point of view of the evils attending the illicit traffic, I am clearly in favour of the system proposed. I think that the system would tend also to reduce and restrict the consumption of the drug in the Tributary Mahals.

There would be difficulty in carrying out the measure. The Rajas might have difficulty in enforcing it. In a paternal Government an order

goes a long way. We have seen this in the effect of the three-mile order. I believe, therefore, that there would be great effect, but not a rigid system at once. I believe a persistent policy would soon effect all that is desired. I believe it would be

much better to have a persistent policy than a policy of vacillation, as in the past, which is perhaps inseparable from a struggle against smuggling.

9. Evidence of MR. J. C. PRICE, *Magistrate and Collector, Rajshahi.*

1. I have served 32 years in Bengal, having been employed in no less than 14 different districts of the province; in some of them I have served more than once. For the last four years I have been District Officer in Rajshahi, where I have had the supervision of the Ganja Mahal.

2. The definitions in Dr. Prain's report may be accepted. The local names are (1) bhang or siddhi, (2) charas, and (3) ganja. Rolling by the hand is also applied in the manufacture of round ganja, besides rolling under foot.

3. The hemp plant grows spontaneously in all districts of Bengal. It is to be seen growing in the Ganja Office compound at Naogaon: most probably the seeds of plants brought to the office for weighment have fallen off and germinated. There is scarcely a place where it does not grow wild to a smaller or larger extent. In the *chatars*, i.e., manufacturing grounds and adjacent places, and in waste lands on the outskirts of villages and around dwelling-houses in the ganja tract of Rajshahi, the growth of wild bhang is frequently noticed.

4. Bhang and ganja are the only names I know to be used in reference to the plant.

5. The wild hemp affects a high and comparatively dry site. No special conditions of climate or rainfall, or elevation above sea level, appear to be necessary, as it is seen to grow everywhere in Bengal.

6. The growth of the wild hemp is ordinarily scattered. Sometimes in this district half-a-dozen plants may be seen growing together.

But in the ganja-producing tract even a hundred plants may be occasionally noticed in one locality.

7. Yes; for production of ganja in Naogaon, a sub-division of the Rajshahi District, and parts of Bogra and Dinajpur that are adjacent. The area cultivated annually averages 800 acres, the produce being about 8,000 maunds in quantity.

Not for charas; the little charas that adheres to the soles of the feet and to the hands during manufacture of ganja is washed off, as the quantity of it that might be scraped off would be inappreciable small.

8. There has been no appreciable increase or decrease.

I give the figures for the last five years, and the quantities produced—

YEAR.	Bighas actually cultivated.	Quantity produced.
1887-88	2,433	8,266
1888-89	2,408	8,022
1889-90	2,669	6,682
1890-91	1,315	6,040
1891-92	3,644	7,575
1892-93	3,298	9,755

The demand affects the area cultivated. If a season is a bad one, or the plant damaged by floods or otherwise, the supply will be less than usual. A slight impetus will be given to the cultivation in the next season, and perhaps a larger area will be cultivated and a larger quantity be produced. But this impetus will soon cease to have any effect; the third season's cultivation will be normal; and in the long run, matters will settle down to what they were before.

9. The "Gardener's Chronicle,"* already submitted, gives full details of both cultivation and manufacture.

10. They are of the same class as the other agricultural cultivators. There are amongst them both Hindus and Muhammadans in the proportion of 8 to 92 approximately, the proportion for the whole district being 21 Hindus to 71 Muhammadans. But there is no doubt that, as a rule, the cultivation in the ganja tract in and adjacent to Naogaon descends from father to son, because ganja cultivation to succeed requires experience and dexterity. These qualities are to be acquired only by families who have made a speciality of the cultivation. A new cultivator of ganja would in all probability make a mess of the business for the first year or two.

11. No; never.

12. I have no reason; in fact, I am sure it is not.

13. Yes; it is restricted to the sub-division of Naogaon in the Rajshahi district, of which I am now serving as Collector, and to the parts of Bogra and Dinajpur that lie adjacent.

The cause of the restriction is involved in obscurity. It is said that ganja used formerly to be cultivated and manufactured in Jessore also. For some reason or other those engaged in the industry were brought or came to Naogaon, where the cultivation was concentrated. The present ganja tract supplies the requirements of the whole province; this may be the reason that it is not cultivated in other districts also. It would not pay to do so, and the Government supervision would be felt to be irksome. Besides, as explained before, some knowledge of the cultivation and manufacture of ganja is necessary before a person can embark on its production with any chance of success.

The ganja-producing hemp requires a dry soil. At the same time, constant irrigation from a well or tank or river is indispensable. No special conditions of climate or rainfall or elevation above sea level seem to be necessary, for these conditions are fairly similar throughout Bengal to what they are in and about Naogaon. The ganja-producing hemp could certainly not be cultivated in low-lying and damp localities; for instance, in those parts of the district of Rajshahi which do not come under the description of *barind* or high lands.

14. (a) In Bengal ganja is, as described above, prepared only in Naogaon and the parts of Bogra and Dinajpur that lie adjacent.

* Not printed.

(b) Charas is very little, if at all, consumed in this district, and is manufactured, I understand, entirely in Nepal and some parts of the North-Western Provinces, from where it is imported into Calcutta and other consuming districts under cover of an import pass No. 121 issued by the Collector, and distributed to places where it is in demand. The importer brings the quantity passed by the Collector, and duty upon it is realised at Rs 8 per seer, half before the issue of pass and half after the charas arrives. Bhang, I understand, can be and is used by many persons in every district of Bengal. The leaves of the wild plant are taken, dried and pounded, and then mixed with sugar and water, and taken in a draught. Any one can make this "sherbet" for himself. For this kind of use the Bhagalpur and Monghyr bhang is generally preferred. For purposes of taxation these dried leaves are called siddhi. A licensed vendor, authorized to sell, collects the leaves in the presence of an excise officer deputed by the Collector to attend when an application to be allowed to collect bhang is made to him. Duty is paid at 8 annas a seer according to weight. In siddhi-consuming districts the importer, a licensed vendor, stores siddhi in a warehouse, and pays duty for the quantity he takes out. There is no appreciable consumption of siddhi in Rajshahi.

15. I can speak with authority only of ganja, and this can be produced from the cultivated plant only. Ganja is used only for smoking, generally with an admixture of tobacco—to take off, it is said, the harshness of the inhalation.

There are three recognised sorts of ganja manufactured for excise purposes, viz., flat, round, and chur. The two processes of the manufacture of flat and of round ganja vary in some matters of detail. After the plants are matured, they are cut for manufacture and removed from the field to the *chatar*, i.e., manufacturing ground. There the plants are cut into lengths of about 2 ft. each, and are then exposed to the sun and dew. So far, the process is the same in the preparation of flat or round. For manufacture of flat ganja, on the second day those plants which appear to have sufficiently withered are collected and placed layer upon layer in the form of a circle with a diameter of about 4 ft. Two or more men tread upon the ganja twigs thus stacked, with a view to compress them into a flat shape. This process is repeated at intervals of two to three hours, when the stalks are broken and exposed to the sun. Towards the close of the day the twigs are all arranged on mats in a line, and the men commence pressing them from the bottom to the top, care being taken to hold the twigs firmly under the sole of one foot. For the night the twigs are kept upright (by aid of a bamboo pole placed horizontally) on the ground and are covered with a mat. On the third day the twigs are placed together in a new stack, and kept under pressure for some time. The twigs are again taken out and again exposed to the sun. The leaves are then carefully brushed or scraped off by means of the feet, after which the manufacture is completed and the twigs are tied into bundles of two sorts, viz., flat large twigs and flat small twigs. The broken bits that drop off during the process are collected as *chur*.

For manufacture of round ganja, on the second day the plants are rolled under the sole of the feet. When they acquire a rounded form they are exposed to the sun; and as soon as they become a little dried, they are taken up and pressed hard

with the hands to give them a completely round shape. This is repeated several times until sunset. The twigs are tied up in loose bundles and kept under the cover of a mat for the night. On the third day, after 10 A.M., the bundles are untied and the twigs are exposed to the sun piece by piece. They are then taken up and pressed again with the hands and then laid bare and exposed to the sun till they become quite dried. Next the twigs are broken into lengths of 8 to 10 inches, and the bundles are tied together at the end, the bottom being cut uniformly. The ganja is then kept under the cover of a mat for the night. Some time after the bundles are made, the superfluous leaves are scraped off by the application of a stick cut and sharpened to an edge. The manufacture is then complete.

The broken bits that fall off during the manufacture are collected as *chur*, also called *rora*. The leaves are always rejected. The *chur* is, I understand, nothing but the broken bits of flower that break off in the process of manufacture. I believe that the ganja leaf, i.e., the leaf of the cultivated plant, does not contain intoxicant property, and could not make bhang or siddhi.

16. Yes, from the wild plant, wherever it grows. No ganja or charas can possibly be manufactured from the wild hemp plant. This is my own individual opinion; but before committing myself to it, I have made inquiry from those who know about ganja, and I am told that the wild plant cannot produce ganja. I understand that this is due to the absence of flower. It is possible that by a little manipulation at a certain stage in its growth, some flower might be produced in the wild plant. But if it does thus flower, the produce would certainly be much less potent than the usual excise ganja.

17. Answered already.

18. Ganja deteriorates by keeping. It is not accounted to be worth much after two years. In three or four years it is fit only to be thrown away. In this respect it resembles tobacco. Like tobacco, were it compressed and enclosed in hermetically sealed tins, the progress of deterioration might be retarded. But under the present conditions it is kept exposed to all sorts of atmospheric changes, and loses what may be called its fragrance and aroma very soon.

19. Ganja and charas are used only for smoking.

20. As a rule only the poorer classes smoke ganja: they are sanyasis, bairagis, fakirs, mendicants, the poorer agriculturists who work in the fields exposed to the sun or in damp and wet, day-labourers, palki-bearers, and a few prostitutes. The proportion of those who smoke ganja in this district is very small; I do not believe more than 6,000 for the whole district containing a population at the last Census of 1,313,336 souls. The way I make the calculation is as follows:—

The total consumption in Rajshahi District for the year 1891-92 was 87 maunds 36 seers, or 3,516 seers, equal to 281,280 tolas.

Taking all classes of consumers into consideration, the average quantity consumed per head per mensem I estimate to be 4 tolas = $1\frac{1}{2}$ ounces. Therefore, the total of average for the year is $4 \times 12 = 48$ tolas. Therefore, the total number of consumers in the district = $\frac{281,280}{48} = 5,860$, or in round numbers 6,000 persons.

The consumers of ganja are to be found in all parts of the district indiscriminately. About charas I can say nothing.

21. In this district flat ganja is principally smoked. In Calcutta and the metropolitan districts, and in Orissa, I understand round ganja is in demand.

In Eastern Bengal people affect flat ganja mostly.

I give particulars of the export of the different kinds to the different districts (Appendix A).^{*} It is with ganja as with tobacco. The man who has learnt to smoke latakia will stick to it; a man accustomed to bird's-eye will smoke none other. These varieties would be despised by the common sailor, who thinks Limerick Twist the only tobacco fit to smoke. A taste once formed in this direction rarely alters; so it is with ganja. The man or boy who has learnt to smoke with flat keeps to flat; another whom his father or a friend taught to smoke round affects round. Chur is preferred to the other two because it is more free from stalk and is more potent; but as it is made from both flat and round, it is mere caprice or fancy which will induce a man to smoke chur instead of the other two varieties. Chur is cleaner and of course more expensive, and goes further.

22. I have nothing to say.

23. No.

24. I cannot say. I have no good information; but a very small proportion, 1 in 500, will be a habitual drinker or eater of bhang: he will be found principally amongst bairagies, sanyasis, fakirs, who wander about the country.

25. I can speak only of ganja. Smoking ganja is certainly not on the increase.

There is no appreciable difference in the quantity exported to the different districts from Naogaon. The largest differences are found in Shahabad, Darbhanga, Hazaribagh.

From the detail export list^{*} submitted herewith, it will be seen there has not been very great increase in export to any district. But export to all districts of the Patna Division is very large as compared with the export to most other districts in Bengal. The reason for this large export is explained by the fact that from there, that is, Behar, certain quantities are transported to the North-Western Provinces.

26. It is difficult for me to give figures which will carry conviction to the minds of others; but I should say habitual excessive consumers and occasional excessive consumers of ganja are very few—about 5 per cent. each of the total number of consumers. Habitual moderate consumers will be 60 per cent. of consumers; occasional moderate consumers about 30 per cent.

27. Nearly all, if not all, ganja consumers come from the lower orders: agricultural labourers, day-labourers, paliki-bearers, domestic servants, such as syces, mahauts, and people accustomed to hard work. They take a smoke of ganja as a sort of pick-me-up, to be relieved of the discomfort they are called upon to endure in the performance of their duties. These are mostly all habitual or occasional moderate consumers. Jogis, sanyasis, and others who smoke ganja in excess are slaves to a vice, in the same way as drunkards.

28. (a) Habitual moderate consumers, 1 to 2 annas' worth of ganja, i.e., $\frac{1}{4}$ to $\frac{1}{2}$ tola.

(b) Habitual excessive consumers, 4 to 8 annas' worth of ganja, i.e., 1 to 2 tolas.

I must say I am inclined to doubt the accuracy of these estimates. I think the quantities are

^{*} Not printed.

overrated. But not knowing anything personally, I have given what I have been told.

29. Tobacco is ordinarily mixed with ganja in smoking, to correct the harshness of the more potent weed. Ganja by itself burns the throat, even though only five or six whiffs are taken at a time. I understand dhatura is used by sanyasis, jogis, and others for the purpose of inducing intoxication in smoking ganja. I have no idea what bhang massala is. It is not known here.

30. Ganja is generally smoked in company, because a chillum-full is too big a smoke for one smoker. A chillum-full suffices for 3 or 4 smokers. It would be expensive for one smoker to have a chillum-full of ganja all to himself. It burns or affects the throat; so that he could only inhale 7 or 8 whiffs, and then have to lay the chillum aside; the ganja would in the meantime all burn away. Adult males alone smoke ganja, except a few of the lowest order of prostitutes. Children do not smoke, though I have heard of native boys having a smoke of ganja on the sly, much in the same way as an English school-boy will indulge in a clandestine smoke.

31. I could not say anything with authority; I have had no experience.

32. The use of bhang on the fourth day of the Durja Puja, after the idol is committed to the river, is very common among the Hindus. They prepare a sort of drink by pounding siddhi and mixing it with sugar and water, and offer it to all friends and relatives whom they meet. The use is so common and so widespread, that it may be regarded as essential. The consumption of bhang sherbet is very temperate, and has no tendency to become a habit. Ganja is offered to the idol at Tarakeswar in the district of Hughli by almost every one of the pilgrims; and from the compulsory nature of the offering, it appears that it has some kind of religious obligation about it. In Baidyanath temple the Siva is worshipped with siddhi and ganja. In East Bengal a fair is held in honour of the god "Tinnath," where ganja is worshipped. This custom, however, has now nearly died out.

33. There is no decided public opinion in regard to the practice of ganja-smoking; but it may be said that ganja-smoking is in disrepute, for the appellation of "ganja-khor" is a term of opprobrium. Ganja-smoking is thought disreputable merely because the article is cheap, is within the poor man's reach, and is generally the poor man's only stimulant. If the article was expensive, like opium or in a less degree like country liquor, I am sure no disrepute would attach to ganja-smoking in moderation among the natives. "Ganja-khor" is used to denote a man who stoops so low as to seek for a relief from his troubles in so cheap and nasty a stimulant as ganja. Besides, from the religious point of view of both Musalmans and Hindus, recourse to any stimulant, however moderate, is to be deprecated. The strictly orthodox of both sects will not touch any stimulant of any kind. No custom of worshipping the hemp plant has come to my notice. All customs in existence having reference to hemp, have nothing to do with the hemp plant.

34. Undoubtedly the moderate consumers of ganja among day-labourers, paliki-bearers, and others would look upon it as a serious privation, because ganja-smoking affords them relief from toil, and is a source of enjoyment, just in the same way as if you deprived the English navvy of his beer or of his pipe. There would be about

4,000 or 5,000 people in this district who would perhaps feel aggrieved if their supply of ganja was stopped.

35. Of ganja with the greatest ease. Prohibit the cultivation altogether and no ganja could possibly be produced in Naogaon; or enforce strictly the various restrictions already prescribed with regard to the cultivation, manufacture and storage of ganja, and the cultivators would gradually throw up the cultivation of the plant in disgust and betake themselves to the cultivation of jute and sugarcane. I may add that the profits from sugarcane now equal, if they do not exceed, those from ganja; and there is no inquisitorial supervision connected with the cultivation of the former. There would be no illicit consumption, because there would be no ganja at all. Ganja cannot be cultivated secretly by a cultivator. If it were so cultivated, every one would know all about it. Neighbours would turn informers to get the reward which would be offered. The prohibition of the use of ganja would occasion much discontent among the consumers; but such discontent could not in any case amount to a political danger. I do not think there would be any recourse to alcoholic stimulants in case of the prohibition of the use of ganja, because the influence of alcohol is so different from that of ganja. Excessive indulgence in alcohol makes a man generally noisy and boisterous. Ganja renders him quiet and sedate, sometimes morose and sullen, occasionally irritable with a decided disinclination to be disturbed. Recourse to opium would not follow, for opium is too expensive.

36. There is no reason.

37. I do not know anything about charas-smoking.

38. They are all from the same plant, the method of manufacture only being different as between flat and round, and there cannot be any difference in effects.

39. I am acquainted only with ganja, and that is never eaten but smoked. I cannot tell.

40. Not that I know of.

41. The moderate use of ganja in smoking is said to be beneficial, because (a) it promotes digestion and acts like a tonic; because (b) it gives staying-power under severe exertion or exposure, and alleviates the sense of fatigue; because (c) it prevents and cures dysentery and bowel complaints. Only labouring men use ganja habitually in moderation in this way, and very few even of this class.

42 to 57. I believe the moderate use of ganja in smoking to be harmless, because, in my 32 years' experience of Bengal, I have never come across a single instance of the injurious effects of such ganja-smoking. Surely if ganja-smoking was so baneful, and so widespread as many people wish to make out, there would be numerous examples to be met with in every large town, and especially in the hospitals maintained therein. I do not remember to have ever been made acquainted with a single case. I believe moderate consumers of ganja to be inoffensive to their neighbours if left alone; if disturbed, I am told they are very irritable. About the effects of ganja-smoking, immediate or remote, I can say nothing. I have no personal experience. I could speak only from hearsay, and there must be many people able to speak of the effects of ganja-smoking at first hand: I believe, principally because I have not met with a single instance in

my long service, that excessive ganja-smoking is rare—one man in 10,000 perhaps has contracted the vice. It is so easy to indulge in sensational writing in the matter; but the absence of instances leads me to believe that the crusade against ganja-smoking has no grounds. Why should the habit be hereditary? As well might tobacco-smoking be hereditary. Ganja-smoking is a cultivated appetite. The son of a father who smokes ganja might, by the force of example, be led to learn this habit, but certainly not from a natural craving for the indulgence.

I have been told that a draught of bhang, by way of sherbet or perhaps a decoction, is sometimes used as an aphrodisiac. I have never heard about its effects leading to impotence. As I have said before, in the course of 32 years' residence in Bengal, I have never had a criminal before me who was said to have committed an offence under the influence of ganja-smoking. I do not think ganja-smoking has any connection with crime. I do not believe that a large proportion of bad characters are ganja smokers at all. Criminals, when about to commit a premeditated act of violence or other offence, may possibly have a good pull at the ganja chillum as a preliminary in order to fortify themselves or get up Dutch courage, but I have never heard of any instance. An English criminal, very much more often, I believe, takes a glass of grog as a sort of preparation before embarking on the commission of a daring burglary—to steady his nerves, as he would say.

You would not stop the consumption of alcohol entirely because it was once in a way used in this manner. A glass of coca wine would act better, I should say, to secure this end than any stimulant, but you would not prohibit the drinking of coca wine altogether. I have never heard of criminals inducing their victims to partake of a ganja smoke so that they might become stupefied.

I believe complete stupefaction cannot be induced by smoking ganja without admixture. Tobacco is constantly used with ganja in smoking to take off the harshness of the last-mentioned article, which is said to burn the throat even in half-a-dozen whiffs if smoked pure. I know nothing about the admixture of dhatura with ganja. Ganja is not eaten or drunk in Bengal.

The use of charas for smoking alone is so limited in Bengal that it is not possible to take it into account.

58. I think the present system of administration of ganja in Bengal is working extremely well, especially when the moderate dimensions of the entire cost of the establishment are taken into consideration. I believe there is very little smuggling—not 50 maunds—while over 8,000 maunds represent the annual outturn. I doubt that there would be much appreciable reduction in smuggling if ganja was made a monopoly like opium, and the expense of the system of monopoly would be considerably greater. Larger establishments would have to be entertained and store-houses constructed all over the ganja tract.

59. All the material improvements in the system that could have been introduced have already from time to time been applied. Perhaps there is not sufficient pressure put upon cultivators to build proper store-houses, and the duty of chur ganja might be raised, so as to be proportionally equal to that of flat and round. But it should be remembered that the duty has been increased from Re. 1 both for flat and for round in 1854 till it has now reached Rs. 1 for flat, Rs. 7½ for round, and Rs. 2 for chur. Originally only flat and round ganja

were recognised, and the same duty was levied for both. A different rate of duty in Orissa Division was of later introduction, and it is now as follows: Rs. 4½ for flat, Rs. ■ for round, and Rs. 6½ for chur. Compelling cultivators to build secure store-houses would check pilferage and consequent smuggling, and raising the duty on chur would have the effect of limiting the manufacture of chur ganja, which acts detrimentally to the Government revenue owing to the abstraction of the woody portion.

60. I am quite satisfied that the present method of cultivation of the ganja-bearing plant and the process of its manufacture are sufficiently controlled. At the same time I am quite prepared to admit that improved systems of manufacture could be introduced. It is possible that the manufactured ganja could be made up into cakes, like tobacco; but I can give no advice in this matter, not having the necessary information or knowledge.

61. No charas is produced in Bengal.

62. No; the plant is not cultivated, but grows wild.

63. I have no objections, and I cannot indicate any improvements.

64. I have no objections.

65. I think the taxation of ganja is reasonable with reference to siddhi and charas, and with reference to alcoholic and other intoxicants.

66. It is proper that there should be different rates of taxation, as at present, for the different kinds of ganja. The chur has not any or very little admixture of the woody portion of the twigs; while round has a large admixture and flat a larger still. Only the flowery portion, which contains the resinous stimulating matter, is used in smoking, and this alone should be taxed. Ganja is grown in one place only in Bengal, in and around Naogaon of the Rajshahi district.

67. No.

68. There are no such houses or licensed shops. I do not think that I would allow them, because I think the consumption would be stimulated.

But at the same time there is no doubt that many a ganja smoker, especially a traveller or way-farer, takes his smoke in the shop where he buys the ganja. Very often the shopman invites a smoke from the shop-chillum to show the good quality of his ganja.

69. Yes, especially in municipalities, where the Commissioners are consulted.

There is no public opinion outside municipalities; but I never open a new shop in the interior without consulting the residents.

70. I have nothing to say.

Oral evidence.

Question 3.—I have not myself seen the so-called wild plant in all districts; but I have heard that it grows everywhere. I have seen it in districts far apart and with very different conditions, so I have no reason to disbelieve what I have heard. I have never seen the wild plant in *churs* or such alluvial lands. It is in home-stand sites, such as are higher than the surrounding country, that I have seen bhang growing. My experience is not that it is found in *churs*; but it may be so. Bhang flourishes best in the cold weather, when ganja also flourishes; but wild bhang may be seen at all parts of the year.

I should not say that it grows mainly in the riverain districts. I have seen it most abundantly in Hill Tippera.

Question 35.—I wish the Commission to understand that the various restrictions of the Board of Revenue have not been strictly enforced. It was felt that their rigid enforcement would tend to destroy the production. The restrictions not strictly enforced are:—

(1) The punctual application for storage license immediately after cutting and manufacture (Rule 12). Since the last two years I have endeavoured to enforce this as strictly as is consistent with the existing condition of affairs. Up to a very recent period they did not apply for licenses for a month or two months, or even three months after storing the ganja. Since the last two or three years I have compelled them to apply for the licenses immediately, but with this reservation that they need not specify for a month the number and weight of bundles to be stored. They are apprehensive that if they give this they would be held responsible for any deviation from the number and weight on inspection, and the cultivators try to put off the evil day of committing themselves.

(2) Next in degree to that is this. According to the Government rules no one but the cultivator may meddle with the ganja when ready to be cut and manufactured. The only exception is when a purchaser comes and takes the whole field and takes all the cultivators' responsibility as to manufacture and storage. But they will not do that. The cultivator does not trust the wholesale purchaser; nor the purchaser the cultivator. Besides, nearly every cultivation is in need of an advance before he proceeds to manufacture. This he gets from the intending wholesale purchaser, who superintends the manufacture of the ganja to suit his own tastes. He practically becomes the owner of the ganja without assuming the responsibilities that devolve on him. In fact the wholesale purchasers are always moving about the ganja tract. I have only to interdict any interference on their part with the manufacture of the ganja until or unless they purchase the produce of the whole field; and their absence from the ganja tract would itself cause the decline of the cultivation of the ganja.

There are also points of less importance (*e.g.*, the *adhidari* system of sharing fields); but these are the two chief points.

Question 42.—I do not discuss in my written answer the excessive use of ganja. I only deal with the moderate use. My reason is that I have never come across an instance of the effects of excessive use. I know, of course, that the asylum statistics show lunacy as due to ganja. But this has never come before me in my own experience. I have never seen any case in which evil effects on health or otherwise have been pointed out to me as due to ganja. I have never seen a social wreck whose ruin was attributed to ganja. It may seem an extraordinary thing to say; but I have never had a man pointed out to me with, "Look, there is a ganja-khor. See what

the drug has done for him." I have seen evil effects of alcohol. I knew one man who cut his throat in delirium tremens. I have known several cases of the evil effects of alcohol, not many, but certainly some among natives. I cannot explain why my experience of ganja should differ from what is frequently asserted. It may be unique. But it is my experience. I have no doubt that disease and other evil things which have no sort of connection with ganja are often attributed to it. It is natural to cry down the poor man's stimulant. The rich men and leaders of society do not use it.

Question 35.—I do not believe that prohibition of ganja would lead to any appreciable increase in consumption of alcohol or to any increase at all in opium. I think the poor man would have to do without his stimulant. I think the expense of alcohol has to be taken into account. But the principal thing is the difference of habit. I know that a number of poor persons of the same classes as take ganja already take alcohol. But my experience is that these poor people take alcohol with a view to getting intoxicated; and they cannot get enough without paying high for it. My idea is that ganja is not used with a view to becoming intoxicated or incapacitated, but only for relief. A man says of weak liquor, "Is men nasha nahin hai"—by which I understand him to mean that there it is not strong enough to intoxicate. As to the better classes, I cannot presume to give any opinion as to whether any of them used ganja formerly and have given it up for liquor.

Question 65.—I think that the limit of taxation in regard to ganja has been reached; for while the consumption of alcohol has a tendency to rise, that of ganja has been steadily decreasing. The consumption of ganja has fallen from an estimated production of 26,677 maunds in 1854 and a total of 8,125 maunds of retail sale in Bengal in 1873-74, to 5,451 maunds of retail sale in 1892-93. This shows a marked decrease owing to the growing taxation. It might be possible to go a little further without extinguishing ganja; but my opinion is that if Government went much further in taxation it would extinguish the industry altogether. That is, if pushed far enough, and not very far either, an increase in the price of the drug from increased taxation would tend to extinguish the demand.

Question 59.—The actual procedure in regard to the cultivation and distribution of ganja is as follows:—A man wants to grow. He applies on a prescribed form for permission to cultivate. He has to give the survey number of the field and the area. He may apply for what area he wants. License, which is free of any fee, is never refused except in case of misconduct during the previous year. I myself have refused on this ground. After the cultivator gets his license there is no active interference with him except to see that the land cultivated corresponds with the register, so as to check the production. No pressure, of course, would be brought to bear on a man to cultivate. If he did not, the entry would be altered. But a man cultivating more than his license covered would be liable to prosecution. There is no active interference with the man beyond this inspection of the fields until the man has manufactured his crop. Then he has to apply for a storage license. In his application he specifies the kind of ganja, the estimated quantity, and the number of bundles. The bundles are of prescribed size. No weightments are made. The statement of quantity is an estimate. The cultivator makes the estimate. It is checked by

the supervisor. The cultivator cannot wait for the supervisor; so he has to check it either in the place of manufacture at the field or in the cultivator's store, according to the pressure of work on him. In many cases there is no need to apply for storage license when a purchaser is found before manufacture is complete. The ganja is then taken direct to the weighing shed. A supervisor should then be present; but there are only three. The stuff cannot be removed to the weighing shed without the supervisor's permission.

In the store the stuff is entirely in the cultivator's charge; but it is inspected periodically. The whole of the stocks are, I believe, as a fact, inspected once a month, and weighed if there is any suspicion of fraud, i.e., of clandestine disposal of any of the stuff.

The goladar is unrestricted in his dealings with the cultivator; but the supervisor's permission is required for the removal of the stuff, and it can only be moved to the Government weighing shed.

Stocks not sold remain in the cultivator's private stores, but are destroyed after two years if not sold. There is no special standard of wastage, but a man is expected to explain any serious variation; and this is one of the reasons why cultivators will not apply punctually for storage license.

I should have said that the permission of the supervisor is necessary before cutting the crop. But the supervisor need not be present. All the time the crop is growing, estimates of the crop are being entered in the diaries; and any important discrepancy would lead to enquiries being made.

The opportunities for fraud or clandestine disposal of the crop are few—

- (1) There is always a chance of pilferage from the field, generally speaking, by an outsider. Mendicants have been detected and punished for this. Pilfering of a trifling character by the owner would be more difficult of detection. Extensive pilfering must be seldom indulged in, (a) because he has in all probability entered into negotiations for disposal of the produce of his whole field at a better price than he would get locally, and (b) because it is the interest of all persons to give information to the police, and the consequence of detection would be most serious.
- (2) In the above there is an opportunity for fraud owing to the fact that absolute accuracy of figures is not and cannot be secured in regard to the quantity in store. It begins with an estimate, and allowance has to be made for dryage, damage, and waste. The only real test is at the weighing shed.

I think the most favourable opportunity for fraud is at the time of manufacture. For ten to one the supervisor has not been able to make the final estimate; and there the drug is in the hands of the cultivator and purchaser. Fraud, when the stuff is in the store of the cultivator, is much less likely, because the estimate has been made. At present the great uncertainty regarding the amount of damage makes it impossible to insist on accuracy. Therefore I am trying to enforce the rule that the stores must be "secure." Apart from this there is no check on pilfering in having even secure store houses so long as they are in the hands of the cultivators.

Therefore the most complete system would be to have a public gola. There are none provided. I do not recommend them, because the custody of the stuff would be in the hands of Government officers and subordinates. They would not take care of the stuff as the owners would. No doubt a well-built Government gola would be safer both from vermin and from abstraction than the houses of the cultivators. I do not think there would be any great difficulty if there were several Government golas situated in central places; but I do not think the cultivators would view the change with favour. They would require to have access to the stuff from time to time. If the stuff were weighed and registered and put in a secure place, the cultivator would not want to see it often. He would want to see it two or three times a week in wet weather. I see no great objection to the plan. The concentration of the market would also be a great advantage. The initial expense is a great objection, unless it is believed that much is abstracted. I do not think there is much pilfering; but I have no data of course. I do not think the expenditure on buildings and establishment would be recouped by the prevention of such pilfering as takes place. At the same time you cannot have a perfect system without Government golas.

At present some believe that wholesale vendors make high profits, and that retail vendors are in the dark when bidding at auction owing to the ignorance of what they will have to pay for the stuff. I do not think myself that the wholesale vendor has too much profit in view of his expenses and the risks of the trade, because I have estimated that his net profits are only from Rs. 10. to Rs. 15 a maund on an average throughout the province. His expenses are in transport, buildings and establishments, and the risk of expenditure on the duty on waste above the allowed percentage is great. As to the retail vendor, of course he does not know what price he has to pay for the stuff, but it is a speculation, and I see no reason why Government should interfere. He knows his own business. There is nothing to prevent a retail vendor going to Naogaon to buy ganja if he has a wholesale gola in the importing district. He must have this, or where can he take the ganja? A retail vendor, to deal direct with the cultivator, must become also a wholesale vendor. And I have no doubt that there are cases where the wholesale dealer has the monopoly of the retail trade as well, *i.e.*, where the whole ganja trade is in the hands of a syndicate. I have my attention drawn to Rule 27 of Section XX of the Manual. But it contemplates a warehouse. I have no doubt this means a wholesale storehouse in the importing district. Therefore the

retail vendor must be a wholesale vendor before he can purchase direct. The retail dealer can go to any wholesale dealer. At the head-quarters of my district there are three wholesale dealers. There would thus be competition. This is, of course, liable to combination. I think the retail vendor can go to the wholesale dealer of any district. This is contemplated by Rule 60 of Section XX of the Manual. The income from retail licenses has increased steadily. This indicates that the retail licensee makes a profit. I do not think that they are at the mercy of the wholesale dealers, because combination would be difficult among the wholesale vendors of a district. And in any case I see no reason for interference. The rise in retail license fees is due, no doubt, really in large measure to the rise in the price charged for the drug to consumers.

At the same time the retail vendors are in the dark as to the price of the drug when they bid; and the wholesale vendors have better opportunities of knowing what the price will be than the retail vendors can have. For it is the wholesale vendors who go to the ganja-producing tracts and do business there.

The present system affords no criterion of the profits received by the wholesale vendor, except by particular enquiry in each case as to prices and expenses. At present wholesale goladars are appointed on application. I do not think any one would be refused who made satisfactory arrangements. I know in my district there are eight; and I should say that was a very small number as compared with other districts. All the work could be done by one man if he had a monopoly.

Explanatory statement submitted by MR. PRICE.

I said in my evidence that the cultivators would view the introduction of the system of public golas into the ganja tract with disfavour; they would want to inspect and exhibit their stocks three or four times a week. They would want this for some time at first, in their desire to dispose of their stocks. Intending purchasers would not buy without inspection, and it is quite possible that on many days the ganja would be required to be exhibited several times a day to intending purchasers. In any case I am quite sure that a cultivator would wish to view his stock very much oftener than twice or thrice a week when it is stored in a public gola. I omitted to mention this cause of constant inspection when I was being examined.

10. Evidence of Mr. F. H. BARROW, Magistrate and Collector of Bankura.

1. The answers are prepared chiefly by Babu Bhuban Mohan Raha, a retired Deputy Collector, who long held charge of the Excise Department in this district.

2. The definitions of ganja, siddhi or bhang and charas given in the question apply to this district. In this district only two kinds of ganja, *viz.*, round and chur, are consumed.

3. The spontaneous growth of the hemp plant is not allowed in this district; sometimes it grows spontaneously if seeds fall in moist places; but such instances are very rare. It grows wild and

abundantly in the districts of Dacca and Faridpur, and similar districts of which the soil is damp.

4. The wild plant which grows here is called siddhi. Only one kind of wild plant grows.

5. A damp climate and moist soil are favourable to the growth of the wild hemp plant.

6. Ordinarily the growth of the wild hemp is dense. This remark applies to the districts where it grows. Not of course to this, where it grows only sporadically.

7 to 13. Do not apply to this district. The hemp plant for ganja is not cultivated in this

district; but in some places it grows wild and the leaves are generally used as bhang. Wild hemp is not cultivated in this district for the production of ganja. It would be penal to do so.

14. Ganja and charas are not prepared in this district. It is suspected that in a very few instances leaves of wild hemp plant are used as bhang. But the consumption of the so prepared bhang is very inconsiderable.

15. The leaves of wild hemp plants are consumed after being ground into a paste and then dissolved in water and drunk.

16. Here bhang is not generally prepared by the people in their houses. It can be prepared from the hemp plant wherever grown. On enquiry made it appears that charas cannot be prepared from the wild plant, but ganja of very inferior quality may sometimes be prepared.

17. Not applicable to this district.

18. Ganja, charas and bhang do deteriorate by keeping. They quite lose their effect after two years; with ordinary care they can be kept good for one year. By long keeping they lose the resinous matter and consequently their narcotic power; deterioration after two years cannot be prevented by any special measure.

19. As far as this district is concerned, ganja is used only for smoking. Charas is very rarely used in this district, and only by those who have purchased it elsewhere within the prescribed limits.

20. The ganja smokers of this district may be classified as follows:—

	Annas.
Brahmin and other high castes	6
Kamar, Tanti, Teli, and other Nabisaks	7
Lohar, Bagdi, Bauri, and other lower orders	3
TOTAL	16

Ganja is consumed more or less throughout the district.

Charas is seldom used in this district.

21. Round and chur ganja are used in this district indiscriminately, of which the latter is more in requisition in Thana Sonamukhi. Flat ganja is not at all used here.

22. Charas is seldom used; as a matter of fact there is no shop for its vend.

23. Bhang is never used for smoking.

24. The bhang drinkers may be classified as follow:—

	Annas.
Up-countrymen passing through the district or residing in it	12
<i>Bhadralok</i> class of the district	4

They drink and not eat bhang. As a rule the sale of bhang is confined to the towns and large villages, such as Bankura, Vishnupur, Sonamukhi, Gangajalghati, Kotulpur, and Indas.

25. The use of ganja seems to be on the increase. It appears that in the year 1892-93, 21 maunds 36 seers 11 chhitaks were sold against 20 maunds 30 seers 13 chhitaks in the year 1891-92, the increase being 1 maund 5 seers 14 chhitaks. The increase is due probably to the closure of outstill liquor shops over a considerable portion of the district and the high price at which the Sadar Distillery liquor is sold.

There is reason to believe that many persons, who formerly used to drink outstill liquor for its cheapness, have now adopted the habit of ganja smoking.

The use of bhang is on the decrease. In 1892-93, 6 maunds 1 seer 4 chhitaks were sold against 6 maunds 27 seers 14 chhitaks in 1891-92, the decrease being 26 seers 10 chhitaks.

26. The proportions of the ganja smokers in this district may be taken as follows:—

	Annas.
(a) Habitual moderate consumers	8
(b) Do. excessive do.	4
(c) Occasional moderate do.	2
(d) Do. excessive do.	2
TOTAL	16

27. Each of the above kinds of ganja smokers is found more or less in all classes of people.

The smokers are generally people of moderate circumstances. The first step towards ganja smoking is to be attributed to association with people of loose character who are in the habit.

28. The average allowance of ganja per diem to an habitual moderate consumer is $\frac{1}{4}$ th tola, at a cost of one anna, and that to an habitual excessive consumer is half a tola, at a cost of two annas. An excessive consumer does not consume the whole quantity singly, there being some people who generally resort to his place of smoking, which is ordinarily called his *Adda*, and join with him without having to pay anything.

29. Tobacco leaves are ordinarily mixed with ganja by excessive consumers, in order, as they say, to increase the narcotic power of the drug. Sometimes prepared tobacco is mixed with the drug to sweeten the flavour, and this is generally done by the moderate consumers. Dhatura is seldom mixed, except sometimes by sanyasis, fakirs, and sadhus.

Bhang massala is known and is sold for being mixed with bhang. It consists of poppy and anise-seed, black pepper, cucumber seed, and petals of rose flower, and is sold in Calcutta, Hughli and similar large towns. It is not in use in this district.

30. Ganja is smoked both in company and in solitude.

Bhang and charas are used in solitude.

The use of ganja is mainly confined to the male sex, of the *grihasta* class; among women, the majority of prostitutes smoke it.

The use of bhang is also chiefly confined to the male sex both for the sake of pleasure and for medicinal purposes. There are also some women who use it for medicinal purposes only.

The use of charas, as observed elsewhere, is very limited in this district, and those who use it belong to the *Bhadralok* or respectable class.

Ganja, charas and bhang are seldom used by the people before they are 20 or 25 years of age.

It is not usual for children to consume any of these drugs.

31. The habit of consuming these drugs is easily formed, but it is difficult to break off the habit of smoking ganja. There is a tendency in the case of these drugs for the moderate habit to develop into the excessive.

32. In Hindu mythology the god Siva was the greatest of ganja smokers, consequently in every religious ceremony relating to him or to his

consort, Kali or Durga, a very large quantity of ganja is consumed. These ceremonies are Siva-chaturdasi, Chait-sankranti or Sivagajan. These two religious ceremonies are well known and require no description.

In this district Pous-sankranti day, i.e., the last day of the month of Pous, is usually spent by the people in hunting excursions, and a large quantity of ganja is consumed on such occasions. There are also some religious ceremonies in this district called *Ahoratra*, which lasts for a day and night; *Chabhisprahar* which lasts for 3 days and 3 nights; and *Pancharatra* which lasts for 5 days and 5 nights. In these ceremonies large crowds of *Baisnabs* assemble and recite vociferously the names of "Radha Govinda" continuously without any intermission whatever during the time the ceremony is to continue. They divide themselves into parties, and when the energy of one party is exhausted, its place is taken by another. In the above ceremonies ganja is consumed rather excessively.

In the above ceremonies, both social and religious, the consumption of ganja is not considered essential.

It sometimes leads to the formation of the habit.

The consumption of bhang is very considerable on the third or Nabami day of the Durga Puja, when a cup of bhang is drunk by almost every Hindu. On the last day of Durga Puja, after the idols are thrown into the water, it is customary for the Hindus to see their friends and relatives and embrace them; and when visitors come, it is usual for the owner of the house to offer them a cup of bhang and sweetmeats for tiffin.

33. The consumption of these drugs, especially that of ganja, is looked down on. A ganja smoker is generally in bad repute, the reason being probably that the consumption of it excites low propensities and makes a man violent in temper.

The hemp plant is not worshipped in this district.

34. The prohibition of the consumption of any of these drugs by people of all classes who use it will lead to much privation. They would lose appetite, their food would not be easily digested, and they would feel a sort of aching sensation all over their body.

35. It would scarcely be feasible to prohibit the use of any or all of these drugs. The prohibition would certainly lead to smuggling and occasion serious discontent among consumers; but such discontent would not amount to political danger in this district. But the prohibition would be followed probably by recourse to alcoholic stimulants or other drugs.

36. No; alcohol is dearer than these drugs, and is not being substituted for any of them. On the contrary alcohol is at present, on account of its dearness, finding a substitute in ganja.

37. Charas is not practised in this district, except very rarely. It is said, however, that it produces a very mild effect on the smokers and induces sleep. On the other hand, ganja-smoking affects the mind, and excessive indulgence in it makes a man violent in temper and sometimes insane.

38. Of three kinds of ganja, flat is not used in this district. Round and chur produce the same sort of effect on consumers, the only difference being that the chur ganja is more powerful and produces inebriation more rapidly, the reason being that the fragments which constitute chur ganja contain more resinous matter.

Questions 39 to 57 have been answered by Dr. Mukerji as follows:—

39. The drinking of siddhi is the least injurious, and next to that is smoking charas. The smoking of siddhi leaves is probably less injurious than smoking charas. But siddhi-smoking is not in vogue in this district.

40. Yes, very largely. All parts of the plants, the roots, the stem, the large leaves, the flowering tops and resin are all either alone, or mixed with other things, largely used for various diseases—gonorrhoea, diarrhoea, asthma, chronic skin diseases, fresh wounds and sores (to promote granulation), erysipelas, hydrocele and swelled tubes, tetanus, hydrophobia, cholera, rheumatism, neuralgia, infantile convulsions, delirium tremens. It is also used as a powerful aphrodisiac, whether alone or in conjunction with other medicines in the form of *madana modaka*, or in that of majum, which is a much neater preparation.

With regard to the diseases of cattle, the hemp plant, particularly its leaves, are used externally for rheumatism, fresh wounds and sores, and internally for tetanus and hydrophobia; and the effects are more salutary in the case of Grassomivorous animals without any unpleasant after-consequence, as the intoxicating effect of the drug is less perceptible in them than in the carnivorous group.

41. Yes.

(a) It gives ravenous appetite and enables consumer to digest what he eats.

(b) It does, specially to those who have got to do continued hard physical work. It also alleviates fatigue after a long journey, as it is evident in the cases of paliki-bearers, fakirs, who perform not only long journeys, but also expose themselves to the trying vicissitudes of weather.

(c) I have also seen it largely used in malarious districts to counteract exposure to malarious influences and to evade attacks of fever or malarial rheumatism and neuralgia. During epidemic or endemic appearance of cholera it is not only used as an effective medicine mixed with other things, but also alone as a prophylactic by those who are accustomed to it.

Siddhi and the resin are used generally by the better class of people, and owing to the cheapness and greater intoxicating power ganja is used by the commoner people. I consider both of them to be extremely useful. In long continued chronic cases of illness its habitual use does more good than harm.

42. Moderate use even for the sake of pleasure is harmless. The effects are exhilarating. They cause cheerfulness, colour to the complexion, excite imagination into the rapturous ideas, cheer intellect; the common saying goes: *siddhi khélé buddhi baré*. The hemp plant is being used from time immemorial, and in older times it is said even the gods used it specially before going to war, as it is called auspicious (*bejoya*).

43. Yes.

44. The effects are exhilarating and refreshing. It may produce a slight intoxication, which, however, passes off quickly. If taken before meals, it, like tobacco, allays hunger, but also increases appetite in cases of weak digestion and chronic diarrhoea; it not only increases appetite, but also cures or keeps in abeyance diarrhoea. The good effects may last for some time, but the repeated use is necessary in many chronic cases. The moderate use by the habitual leaves little or no unpleasant after-effects. Some uneasiness or longing is felt

for want of subsequent gratification, and it would be a pity to deprive a habitual moderate consumer of his dose when it is so beneficial to him without any marked after-effect.

45. It does not. Nor does it impair constitution, cause any disease, impair moral sense, or insanity, permanent or temporary.

46. But when taken in excess temporarily or habitually, it may cause those constitutional, moral or intellectual derangements as alluded to above. I have seen several cases of insanity principally due to ganja smoking, specially in cases where intellect was weak, but in almost all such cases I found the insanity to be of a temporary nature, which under proper care and restraint passes off in course of time. Some of these insanes, when under observation, often ask for ganja or, in its absence, for tobacco. There are many cases seen who owing to excessive habitual use of ganja suffer from chronic dysentery, asthma or bronchitis, while its moderate use generally cures these ailments.

47 and 48. Not any that I am aware of, whether in the case of moderate or immoderate consumers. On the contrary, I have seen many children of very bright intellect and of excellent parts, though their fathers were or are inveterate consumers.

49 and 50. Yes, but the immoderate use generally causes impotency. I have heard many prostitutes use this drug as an aphrodisiac when they cannot procure alcohol, and in such cases it is liable to be used in excess occasionally.

51 and 52. I have not heard of any crime committed by moderate consumers. But the excessive use causes homicidal tendency, quarrelsomeness, and induces consumers to commit many rash acts, but seldom to commit theft.

But siddhi or charas, even when taken in excess, does not induce consumers to commit any rash act. They in such cases induce laziness, and at the worst confine the consumers to their beds.

53 and 54. Not so as in the case of alcohol. But there have been instances of habitual ganja smokers, who, if occasion requires, take the drug a little in excess to fortify themselves with a view to taking revenge upon their adversaries.

55. Yes; ganja alone is used with the admixture of dhatura, nux vomica, and of both, for the purpose of committing road-poisoning, and instances are not wanting to show that complete stupefaction has been induced or even death has occurred.

56. Dhatura is admixed to siddhi or ganja to increase their intoxicating or even stupefying power. Siddhi or ganja is thus used by the people for their own use, with a view to securing

greater pleasure. Ganja with dhatura, or with nux vomica, or with both, given generally in excess, for administration to others with a criminal motive when some object is to be gained from the stupefaction of the victims. Unpleasant effects have also resulted from one of such admixtures when given to friends simply for fun.

57. I have not seen or heard of ganja or charas being eaten or drunk.

58. The present system of excise administration in respect of hemp drugs seems working well, and no change is necessary.

60. Ganja is not produced in this district.

61. Charas is not produced in this district.

62. In this district hemp plant for the production of bhang grows wild in a very few places and to a very limited extent. It is not feasible to control the growth of such plants. Any attempt to restrict the growth would give rise to discontent without producing any beneficial effect.

63. There is no objection to the present system of $\frac{\text{a wholesale}}{\text{b retail}}$ vend of $\frac{\text{ganja}}{\text{charas,}} \frac{\text{bhang,}}$

64. No objection.

65. The taxation of $\frac{1 \text{ ganja}}{2 \text{ charas}} \frac{3 \text{ bhang}}$ is reasonable with reference to each other and to alcohol or other intoxicants.

66. Yes. It is necessary that there should be different rates of taxation for different kinds of ganja, and such different rates for different kinds of ganja produced in Bengal prevail here. Ganja grown in any other province is not imported into this district.

67. No; there is no objection to the present method of taxing $\frac{1 \text{ ganja,}}{2 \text{ charas,}} \frac{3 \text{ bhang,}}$

68. There are licensed shops in this district for the sale of ganja and bhang, but not for their preparations. There is no shop in this district for the vend of charas.

There is in this district an adequate number of shops, and no increase is called for.

69. The wishes of the people are generally consulted and considered before a shop is opened in any locality, the enquiry being generally made either by the Excise Deputy Collector or by local police.

70. Hemp drugs are neither imported nor smuggled into this district from Native States. Duty is really paid in respect to the ganja and other hemp drugs used in this district. Untaxed drugs are not used.

11. Evidence of MR. F. H. B. SKRINE, Magistrate and Collector of Bhagalpur.

1. These replies have in part been suggested by the local Excise Deputy Collector, Babu Nobin Chandar Kar, who has two years' experience here. My own knowledge has also been freely drawn on.

2. Yes. They are known as bhang, charas and ganja, but charas is not smoked in this district. Ganja is again classified as flat, round, and chur.

3. Bhang grows in profusion wild, and it is impossible to check its use without adopting inquisitorial methods and incurring large expense.

4. Siddhi and bhang, yes.

5. Alluvial land is the best soil for the growth of wild bhang.

6. Generally very dense.

7. Hemp is not cultivated.

13. The cultivation is restricted to one tract on the borders of the Rajshahi and Bogra districts.

14. Bhang is made from the wild plants. The average production is estimated at 200 to 300 maunds a year.

15. When the plants have attained a height of 2 to 3 feet, they are cut and sun-dried. They are then beaten with sticks to separate the leaves from the twigs. The dried leaves constitute bhang, and it is used either as the basis of an infusion or a sweetmeat. It is not smoked.

16. It is made generally by excise vendors at their homes. Yes, it can be prepared from any species of hemp.

17. Bhang is usually made by persons who have excise licenses.

18. Ganja and bhang deteriorate by long keeping. They dry up and lose their power of intoxication. Deterioration arises from damp, the ravages of rats and the length of time during which the drug is stored. If tin-lined air-tight boxes are used, the drug can be kept for years.

19. No charas is consumed in this district. In rare cases it is chewed by ascetics, but it causes vomiting. Oil is extracted from ganja and used in medicine.

20. The labouring classes are the largest consumers of ganja; but debauchees of all ranks and public women also use it. Hindu fakirs are often greatly addicted to it.

21. Flat ganja is preferred as containing less dust and twigs than round, but there is really very little choice.

22. No charas used in this district.

23. Not known.

24. Kayasthas, Brahmins, Kshetriyas and Marwaris consume bhang as a sweetmeat or infusion, generally the latter.

25. On the decrease—not because people are giving up narcotics, but because they cannot afford to pay for such luxuries.

26. The number of moderate consumers is largest.

27. From the labouring classes who have to undergo hard manual labour and others who are given to nomad habits.

28. Four annas and 4 pice of ganja—half chatak and 3 pice of bhang

One bhari and 2 annas of ganja—1 chatak and 6 pice of bhang.

29. (a) Khaini or dry tobacco with ganja; and sugar and water, and sometimes milk with bhang.

(b) Perfumes of various sorts, besides dry tobacco with ganja; and milk, and else spices which are usually used with betel, besides sugar and water with bhang. Dhatura is not mixed with either ganja or bhang. The object of the admixture is to make it palatable.

No preparation as "bharg massala."

30. Bhang and ganja are both consumed in company, but consumers of the upper class prefer solitude. The consumption of ganja is principally confined to males, with whom the habit begins at maturity. Young widows smoke ganja as a means of killing the passions.

31. Yes; and when formed it is very difficult to abandon it. There are cases of moderate consumers who have always been such. But moderate consumers have often increased their doses.

32. At the Sivaratri, Phagwah, Dussahra festivals the consumption of bhang is very brisk. On the occasion of fairs (mêlas) the demand for these drugs also increases.

33. At Sivaratri and Dussahra the consumption of bhang and ganja is considered almost obligatory. Those who take them as a mere observance

of the custom are temperate; but many take such an opportunity thus afforded to indulge in excess.

34. The consumption of bhang is not regarded as so objectionable as that of ganja. The use of all sorts of narcotics is held in disrepute by decent folk. The worship of the hemp plant is unknown.

35. Hard ganja-smokers think that deprivation of the drug will kill them. Moderate indulgers satisfy their craving with another drug when the supply of ganja is cut off. It would be easy to stop the growth and use of ganja; but it is my duty to protest most strongly against such grandmotherly treatment in the present state of public feeling.

Hard smokers will not be satisfied with anything but ganja. Moderate consumers might take to bhang, the growth of which cannot be interfered with.

36. No.

37. No charas is smoked here.

38. None.

39. No preparation of ganja and bhang is smoked here. Ganja is smoked by itself, but not so bhang.

40. Bhang is used in medicine by native physicians. Oil prepared from ganja is also used as a medicine by kavirajes. Bhang is given to cattle as medicine when suffering from cold.

41. Ganja and bhang in small doses may aid digestion.

Both undoubtedly add to staying power.

None of the intoxicants are otherwise beneficial.

The upper classes, say one-tenth, use ganja for purpose (a).

The lower classes, say nine-tenths, use it for purpose (b).

I allude to the moderate use.

42. Its use works no serious mischief in the average human system.

43. Yes.

44. (a) Used moderately, they refresh and create an appetite.

(f) An hour or so.

(g) None.

(h) The want of ganja produces malaise.

45. Bhang fails to stimulate the appetite and ganja unnerves the system if taken habitually. Ganja impairs the constitution if indulged in excess or the consumer does not get sufficient food.

Ganja is used as an aphrodisiac, and it certainly stimulates the sexual power if used in small doses. But then comes the inevitable reaction, and impotence with its attendant miseries follows.

All these questions are for specialists in mental diseases. But my experience convinces me that consumers of ganja and bhang who are deficient in self-control develop into insanes. Such human weeds would, however, ruin themselves in other ways if the drug supply were stopped.

46. See above.

47. No.

48. The tendency to excessive use is not hereditary.

49. Not by prostitutes; but see above.

50. No. The excessive use of ganja has the tendency to check sexual passion.

51 and 52. No. Those addicted to ganja smoking sometimes steal to pay for their darling drug.

It is not taken as an inducement to commit heinous crimes. They are used by habitual criminals, but I do not think as a stimulus to crime.

53. No.

54. Bhang or ganja taken in any quantity rarely makes a man violent.

55. Sometimes complete stupefaction may be effected by the use of ganja in persons unaccustomed to it. Opium is also sometimes mixed with it for this purpose.

56. Not known.

57. See above.

58. It works well on the whole; but, like all institutions, it is capable of improvement.

59. If the use of ganja is to be tolerated, I should prefer it issued from governmental warehouses to retailers, the price being periodically raised or lowered with the demand. The present system of levying duty and transit expenses is cumbersome and open to fraud.

60. Not produced.

61. No charas produced.

62. The cultivation of bhang cannot be controlled.

63. See above, answer 59.

64. Exports to other provinces should be certainly allowed.

65. I do not see any substantial difference between taxation on ganja and taxation on spirits and tobacco. Civilised governments have all agreed that intoxicants are proper subjects for taxation; and prohibition is opposed to the modern spirit as well as to racial progress. It is only the human weeds whose decay is a gain to the race who succumb. I am at one with Bishop Magee, who said that he would rather see his countrymen drunk and free; and I abhor the principles and tactics of the so-called temperance fanatics.

66. No.

67. See answer 59.

68. Yes; consumption on the premises should not be allowed. Men smoking there are nuisances.

69. Neighbours are generally consulted, and I think this is sufficient.

70. Yes; Nepal ganja is smuggled into this district, and affects the sale of the drug here. This practice should be stopped. The border shops suffer much from smuggling.

Oral evidence.

Question 1.—I entered the service 23 years ago, and I have served principally in East and North-East Bengal. I acted as Collector and Magistrate of Bhagalpur for 4 or 5 months in 1883, and have now been here since the end of October last.

Question 3.—My former experience led me to believe that the hemp plant grew more commonly in Bhagalpur than in other districts, but I have now little doubt the circumstances of the district are much the same as those of other riparian districts. In 1883 I made a report to the Board of Revenue describing the prevalence of the wild growth of the hemp plant in Bhagalpur, and suggesting measures for its extirpation or cultivation under license. I have noticed the plant growing principally on "diyara" lands, i.e., alluvial lands of new formation. Such lands are generally private property. I have been touring in the district

during the cold season, and my views as to the prevalence of the wild growth are considerably modified. There is now less growth on account of the extension of cultivation on the "diyara" lands, which are eagerly taken up for the cultivation of the cold-weather crops. I have not recently seen more than an acre or two of the wild growth in any one plot. The aggregate area on which the plant is found would still be considerable. On the "diyara" lands the plant is found growing with tamarisk and tiger grass and other jungle plants. I noticed much the same sort of growth in the Rajshahi district, though not to the same extent, because the area of riparian lands is not so great. The same description applies to the Murshidabad and Nadia and Rungpur districts. All these districts lie along the Ganges. I have not observed the same conditions in any other districts.

In answer to my report of 1883 the Board, as well as I remember, wrote that the growth was so considerable that they did not consider it practicable to limit it. With reference to my remarks under 35 and 62, I would say that it may be physically possible to control the growth, but it would involve an inquisitorial system, which would be very distasteful to the people. I do not think any class of the people would be glad to see the large patches of growth exterminated. Bhang is used almost universally as an exhilarating or cooling drink by the people as we use tea and coffee, also as a basis for many kinds of sweetmeats, and as a medicine for horses and cattle. It also enters into the religious practices of large classes of Hindus, comprising sadhus and sanyasis, vaishnavs, or followers of Chaitanya and the worshippers of Kali. These are reasons which would render the attempt to exterminate the plants wholesale unpopular.

Still more urgent reasons for the unpopularity of such a measure would be the facts that the plant grows in the immediate neighbourhood of villages and habitations throughout Bengal, in the shade of ruined buildings which are found in all homesteads, and the attempt to exterminate would necessitate a system of domiciliary visits, which would cause great annoyance. I do not think any argument can be drawn for extermination from the fact that the poppy has been successfully controlled, nor from the fact that the hemp plant is in evidence where it grows, because the growth of the hemp plant is very rank and exuberant and it prefers dark shady places. Nor can any strong argument be derived from successful prohibition, if such has been the case in the Central Provinces and Assam, because in the Central Provinces villages are more or less of an urban character, whereas in Bengal the homesteads are isolated and surrounded by fruit trees and jungle. As regards Assam, it is a thinly peopled province and the population is backward, and it is conceivable that under such conditions an excise officer should be able to deal successfully with the matter. On the whole, then, I am strongly opposed, unless the necessity is clearly established, to any attempt being made to regulate the spontaneous growth of hemp, though I do not go so far as to say it would be impossible. I do not think the people would have any difficulty in exterminating the plant themselves in the neighbourhood of their homesteads if the prohibition were issued. It would have to be done perseveringly, and might take two or three years to complete the work.

Question 14.—In this answer I was speaking of Shahabad with reference to the estimate of

production of bhang. I have seen the wild hemp plant in flower. It seems to me to resemble that of the cultivated plant, but in miniature. The wild plant is much smaller than the cultivated plant.

Question 17.—In this answer I am referring to the manufacture of the dry leaf from the plants in the Bhagalpur district. As a rule, in other parts of Bengal the people are in the habit of gathering the plants for themselves and drying the leaves for home use. This is not to my knowledge illegal, subject to the limit of possession. Regarding Bhagalpur my information is derived from the Excise Deputy Collector, but I am doubtful if it is correct for non-urban areas. In those tracts I believe the practice is much the same as in other districts.

Question 25.—The decrease of consumption of the hemp drugs is true of Bengal generally, and is due to agricultural depression and high prices. There is now a reaction owing to a favourable harvest last year, and I am confident the demand for the drugs is now on the increase.

Excised tari and pachwai (rice beer) are much cheaper than the hemp drugs, *i.e.*, they involve less cost to the moderate consumer. The lowest grade of excised spirit also is probably cheaper in the same sense; but not so the higher grade of liquor and opium. Pachwai is not excised everywhere, and then of course it is cheaper still.

Question 59.—I should prefer that Government

should keep the storage of ganja in its own hands. There would then be less difficulty in enhancing the duties. I advocate the abolition of the middleman and the substitution of a system by which Government should purchase and store the whole crop of ganja in its own warehouses, thus reaping the profits of the middleman, regulating the price to the retail vendor, and ensuring proper custody of the drug. Government will of course suffer all the losses from damage to the stored drugs by rats, damp, and dryage, but the loss will be much more than recouped. There would be no sentimental objection in this country to Government undertaking directly the wholesale disposal of the drug, and as regards English objections we should be able to meet them by showing that the system enabled us effectually to control the consumption. There would be no need for passes under this system, because the drug would be carried to the headquarters of districts by Government under escort, and the fraud which results from the system of passes would be obviated. It was this species of fraud that I had in mind in the last sentence of my answer. This is the system which I should prefer, but there is a good deal to be said for the system which I understand prevails in the Central Provinces, which fixes the price at which the wholesale vendor must sell to the retail vendor, and renders the wholesale licenses subject to sale by auction. I wish to lay stress on the desirability of reducing the loss to Government which now results from wastage, dryage, and damage.

12. Evidence of MR. A. C. TUTE, Magistrate and Collector of Dinajpur.

1. As Collector of Dinajpur on a small portion of which Government ganja tract lies, and as a District Officer of several of the other districts of Bengal, I have had opportunities of gaining information on this subject. I have also consulted leading gentlemen in the place, and, unless otherwise mentioned, these answers are the net result of my enquiries.

2. Yes; these can be accepted. Bhang is only known here in the name of siddhi. Ganja has no peculiar other name.

3. Bhang grows in almost all parts in all districts of North Bengal, specially in Dinajpur and Rangpur, and ganja in Rajshahi, Bogra, and Dinajpur; the production in Rajshahi being the highest, and that in Bogra lowest.

4. It is not known under any different names. (b) The plants belong to the same species, but are somewhat different.

5. Bhang grows naturally in damp soil, but ganja has a peculiar tendency of growing in places where the soil is moist, and in places, of course, neat and clean and well cultivated. Generally high lands are selected for the growth of ganja, the site selected being open field, on which the shadow of no large tree can fall.

6. Dense.

7. (a) Yes, in Mahadebpur Thana.

(b) No.

(c) No, as it grows wildy.

(d) No.

Ganja grows only in three or four villages in Mahadebpur Thana in this district.

8. None.

9. The ground requires to be ploughed up very carefully. The great object of this ploughing is to free the soil of all herbage and stubble. The next process is to throw sods on the field and surround it with a ridge. The third operation is to manure the fields with cowdung. When fields are fully prepared by this course of dressing, the seedlings are transplanted. About a lapse of three or four weeks, dressing and manuring take place. Manure consists in some cases of cowdung, and in others of oil-cake and cowdung. After this the plants are trimmed. The next process is to destroy the male plants. After this a second process of transplantation takes place. After this the female plants begin to flower, which is known as ganja.

10. No; they are agricultural cultivators.

11. No.

12. No.

13. It is cultivated in Dinajpur, Bogra, and Rajshahi, the necessary condition for its growth being damp soil, high land and sufficient rainfall, and moist climate.

14. (a) Ganja in three or four villages in Thana Mahadebpur.

(b) No.

(c) Yes.

16. Yes; it can be prepared from the hemp plant wherever grown. Ganja and charas cannot be prepared from the wild plant.

17. Generally the cultivating classes.

18. Ganja only deteriorates by keeping, but neither bhang nor charas. Yes, ganja loses its resinous substance after about two years, its rapid deterioration being due to its susceptibility to dampness. It can be kept in a good condition if protected from dampness.

19. Ganja and charas are generally used for smoking purposes. In Eastern Districts majum, which is a preparation of ganja and some sweets, is eaten.

20. Lower classes generally smoke ganja. Charas is rarely used. Most of the Sanyasis and mendicants, day-labourers, and up-country palki bearers generally use ganja.

21. Flat is prepared for smoking.

22. None here.

23. Bhang is not used for smoking.

24. In Behar respectable people drink bhang daily as a luxury; in Bengal, it is used by all classes, specially the middle class. In Bengal people drink bhang at the time of some religious festival. Regular bhang eaters are few and far between. Bhang is eaten very rarely, but cooked.

25. The use of ganja is on the increase. The reason for increase in consumption here is that the people of this district shew likeness to ganja in preference to drink, the consequence being the consumption of ganja increases with the decline of that of country liquor.

26. The approximate figure for ganja will be this—

(a) 60 per cent.

(b) 20 per cent.

(c) 15 per cent.

(d) 5 per cent.

27. (a) This class consists of very low class of people, viz., fishermen, Hanoi domes.

(b) Consists of Sanysais, Ramads, etc.

(c) Consists of middle, sometimes of wealthy, class.

(d) Beggars and very poor men.

The medicants travel from place to place, and the reason of their using ganja is that they can endure different climates. The menials use them with a view to do hard work.

28. (a) $\frac{1}{2}$ anna.

(b) 2 annas.

29. Dhatura is mixed with bhang sometimes in order to make it strong.

The ordinary bhang massala is black pepper and anise-seed. It is made rich by mixing milk, sugar, rose-water, and cardamom, which are used by the higher classes.

30. Ganja is consumed generally in company, and bhang in solitude. They are used by adults and old men. They are mainly confined to the male sex. Children never consume any of these drugs, except for medicinal purposes.

31. (a) The habit of smoking ganja is easily formed.

(c) Yes; it is marked in the case of ganja.

32. Bhang is generally drunk in small quantities on the fourth day of the Durga Puja, in which its drinking is compulsory on every devout Hindu. The use of this drug is moderate. Many take only a drop of it. It is not injurious, and does not lead to habit.

33. The use of ganja is regarded as disreputable. The public opinion is against it.

34. Yes, by the use the consumers feel a sort of pleasure which they cannot forego.

35. It is not feasible with regard to bhang, as it grows wild; it may be practicable with ganja.

The prohibition would certainly cause widespread discontent which would not create any political danger. The prohibition would be followed by recourse to some other stimulants.

36. No.

37. Charas is the most powerful, but has not the same inducement to become a habit as ganja.

38. I believe they are the same thing in different forms.

39. Yes; it is less powerful.

40. Bhang is prescribed by the native school of physicians as medicine. Bhang is used as a treatment for cattle-disease.

41. (a) Bhang is a very digestive article of food.

(b) Yes; for the time, to be followed by greater exhaustion.

(c) Yes; for the relief of pain it is used as an intoxicant or narcotic.

42. Moderate use is harmless, but it may always lead to excess.

43. Yes.

44. It intoxicates. At first is refreshing. Does intoxicate. It does create a false appetite. Its after-effects are depression. There is always a desire to repeat the dose.

45. (d) Charas smokers suffer from asthmatical breathing. Ganja causes dysentery.

(e) Yes.

(f) It produces insanity.

55. (b) Yes.

56. I believe dhatura is mixed with it to act as an antidote against the bad effects of charas on the lungs.

58. Yes; I consider it to be capable of improvement.

59. I would wish to see the goladari system abolished. The ganja should be sold in the way the opium is being sold now. This would return a heavy profit to Government.

60. I think that a smuggling to a large extent takes place. I should like to see a large staff of detective officers appointed.

61. None.

62. Not at all.

63. Wholesale vend of ganja leads to much wastage. I would like to see it abolished. The Government itself should be the vendor as in the case of opium.

65. Except where it could be shown to be to the interests of the revenue, such as by making a change in the goladari system, I would not interfere with the consumption of ganja amongst those who habitually use it.

66. Yes. The proportion of taxation on each kind of ganja as exists now should be retained. I do not advocate different taxation on ganja grown in different localities (see 65).

67. See 65.

68. Yes. It is better that ganja should be consumed as we do tobacco, not in shops. Ganja shops are apt to develop into places for the concoction of crime.

69. No. A shop is opened where Collector thinks that it would be paying.

I do not think it is necessary to consult local opinion in this matter, for I don't believe there is any public opinion on the subject.

70. None.

13. Evidence of MR. H. C. WILLIAMS,* *Magistrate and Collector of Darbhanga.*

Oral evidence.

I have been over twenty-two years in the service. I was twelve years in Assam (including two years on furlough.) This was after seven years in the Central Provinces. Since leaving Assam I have been three years in Bengal. In Assam, I was Assistant Commissioner in Cachar, Deputy Commissioner in the Darrang District, and then for four and a half years Inspector-General of Police, Excise Commissioner, etc.

Question 5.—On the borders of Nepal there is a great deal of wild hemp; but it is nothing like so common here as in Assam. There it grows wherever a house had been. As a rule it was near the sites of old villages. I think you may be certain that there were houses some time wherever it is found, though raids may have cleared them away. I have never seen a large area covered with it. A patch would describe the largest area I have seen. Here, a gentleman I was driving with said it was grown everywhere, and he would show me it. He could not. The reason assigned for the failure was that the police had been rooting it up. But it is really rare in that part of the Darbhanga district.

Question 35.—I call this drug a curse to the country on account of what it does in the way of producing crime. It was not in connection with insanity, but mainly in connection with crime that I thus wrote.

Question 45.—My opinion in regard to ganja producing insanity of a temporary character was based on the case of my bearer, who had suffered from the effects two or three times and had to be locked up once in Tezpur owing to losing his head from using the drug. He was an occasional excessive consumer. He had bouts of it. He was not one of the class of people that take it habitually to enable them to stand fatigue. He was not, I believe, a regular consumer. I believe he took it more likely as a debauch than as a prophylactic against fever. He did not suffer much from fever. The longest time he was under the influence of the drug was three or four days. He was an Uriya. He did not drink, I believe. He used to break out every four weeks or so. He was only once bad enough to be locked up in jail; otherwise I used just to send him to his house, as he was stupid. I do not know the composition he smoked. This was perhaps rather a case of intoxication than of insanity. But it bore no resemblance to alcoholic intoxication. I should rather call it temporary insanity. As a man suffering from delirium tremens is partly intoxicated and partly insane; so was this man. But I see no resemblance to delirium tremens in the case. I have seen only one case of delirium tremens, and that was a European. I cannot distinguish between intoxication and insanity in regard to ganja. I have not sufficient experience. This is the only case of this kind that I have personally known. I know another

servant who simply became stupid when he had taken too much.

My remark about the return of insanity on resumption of the drug is based mainly on my personal knowledge of the case of my bearer, as described above.

Question 53.—My remark about cases of homicidal frenzy being innumerable is merely based on newspapers. But the case of the servant of the Maharaja of Darbhanga was known to me. I was told he did not take liquor. The case occurred in Calcutta and I was in Darbhanga; so my knowledge of it was entirely hearsay.

My opinion is a general impression based on newspapers and also on my recollection of cases I heard of in Assam. But I can recall no particular case except the case of the Darbhanga sowar I have quoted.

Question 62.—In view of agitation about the cadastral survey and cow protection, I think it would be inexpedient at present to start any measures of special interference with the growth of bhang in Behar. If these farmers had the exclusive right to gather the wild bhang, there would be interference. Wherever the stuff grows wild near the villages or compounds, there people sell it to vendors or pluck it and use it. This would be all interfered with. At present the stuff is simply gathered and sent off by rail: that is in accordance with law. There is no interference. I think that if an order were issued against the growth or existence of the plant in occupied land, it could be carried out. I think it could be out-rooted. But whether it is advisable or necessary, I cannot say. I do not know what harm results from such growth. Practically all land is occupied here. I think the order could be carried out; and I do not think it would cause inconvenience. In ordinary times I think it would lead to little or no opposition. At present you would have objectors.

I have heard that the drug is used for cattle. I heard that the wild hemp exported by rail was used for cattle. The police and others told me people did not consume it themselves, but that it was used for cattle. At the same time you find people coming in from Nepal smoking what appears to be the wild ganja.

Question 65.—I should be inclined to assimilate the ganja system as far as possible to that of opium. I think that would be well. I see no objection to that. If a Government monopoly were objected to on sentimental grounds, I should go as near to it as possible. The reason why I should be lenient about wild bhang is that I understand it is used for cattle, and hardly at all for drinking by human beings. As to ganja, I have no reason to think that the limit of taxation has been reached; for the price to the consumer is less in Bengal than in the Assam Valley notwithstanding recent increase of taxation in Bengal.

* Mr. Williams was examined orally with reference to his marginal remarks on the written paper of witness No. 71 (Roy Brahma Dutt).

14. Evidence of MR. G. STEVENSON, *Magistrate and Collector of Cuttack.*

Oral evidence.

I have been in the service since 1872, and in this district as Collector since November 1890. I have no concern with the Tributary Mahals. All Collectors in this division are *ex-officio* Assistant Superintendents of the Gurjat States; but the Commissioner being here, I have nothing to do with them.

I have ordered a copy of Mr. Kanti Bhusan Sen's report on the ganja across the Gurjat Border to be sent to the Commission with my forwarding letter. I have no knowledge of the cultivation across the border such as would enable me to give evidence that would be of use to the Commission. The plant grows—an odd plant here and there—in this district, principally towards the hills. I believe that these plants are sometimes found in this district apart from habitations; but the cases that come to light are cases of plants grown in the enclosures. The amount grown in this district may be left out of account in regard to any measures taken in respect to ganja, it is so small. An order requiring that it should cease could easily be carried out. But there is much jungle land to the north of Cuttack along the frontier in this district, and there the cultivation of a few plants would be difficult of detection.

I know the manufactured Gurjat ganja. It is simply the plant dried. It is grown everywhere in the Gurjat States for consumption. I believe it is more grown near the border to supply our territory. It is also grown in detached Gurjat villages surrounded by our territory. This has also been waved in the face of our excise officers since the three-mile prohibition was withdrawn by the Board. I think the limit of three miles from the border was taken from the old three-mile rule for excise shops. Of course the difficulty is in enforcing the prohibition. The arrangement was political. The Rajas have neither the will nor the power to enforce prohibition in their wild tracts. I believe the three-mile limit was chosen that we might have our eye on the matter and enforce the prohibition; but this had to be by reference to the Superintendent and the Raja. I have never had to do with any Tributary State myself; but I make this statement regarding their will and power to enforce prohibition from what I know of this part of the country.

I think the three-mile rule was imposed in 1878* and abolished† in 1889. So far as I remember, the rule was abolished (1) because of the difficulty of enforcing it, and (2) because it was believed by the Government that Gurjat ganja was drunk, not smoked, and was less deleterious than the Rajshahi ganja. It was thought to be better not to discourage the Gurjat ganja. It was a mistake to suppose that Gurjat ganja was not smoked. It is smoked. I believe the Government have admitted this. So far as I hear, there is no systematic cultivation of ganja across the

border. I have heard that the male plants are not exterminated, nor are the flowering tops separately collected. The part of the plant used is only the upper part of the plant. I should say that the statement made in answer 9 by Kanti Bhusan Sen is quite correct. This upper part of the plant is the Gurjat ganja that is smoked. This is distinct from the siddhi or bhang, which is licitly imported from Gurjat. As to the comparative effects of Gurjat and Rajshahi ganja, I am not in a position to give an opinion. I believe, however, that the Government of Bengal has reconsidered its view that the Gurjat is less deleterious than the Rajshahi. I have not sufficient ground for any opinion of my own.

Mr. Kanti Bhusan Sen's statement regarding the licit use of Gurjat ganja in this district is no doubt correct. He has the figures. But it may be noted that the 8 maunds minimum referred to by him was only in force from 1891 to August 1893. Importation of Gurjat ganja was entirely prohibited by Government order at page 546 of *Calcutta Gazette*, dated 21st June 1882. It was again allowed (1) in the case of siddhi by order at page 756 of *Calcutta Gazette*, dated 23rd July 1890; (2) in the case of Gurjat ganja by order at page 1200 of *Calcutta Gazette*, dated 17th December 1890. From this time to 1892 the maximum amount that could legally be possessed without license was 20 tolas. By Board's orders of 13th April 1892, this was reduced to 5 tolas. As to illicit use, it is impossible to give accurate information. Nothing is known, except from the cases that come to light. There are no data on which we can estimate the illicit consumption, except that the consumption of licit ganja is on the decrease. Unless ganja is being given up for any reason, that would indicate that illicit consumption was on the increase. I know of no reason why people should give up ganja. The price of liquor is higher, and caste prejudices are against liquor. Although the price of ganja has recently been considerably raised by taxation, it is still much cheaper as an intoxicant than liquor, *i. e.*, having regard to its intoxicating quality. Unless we are to encourage smuggling, I think that in this district the rate for Rajshahi ganja, though lower than in other divisions of the province, is as high as can be. It has reached the limit, unless pressure can be put on Native States to control their own ganja effectively, or we can do it for them. If they could do this, there would be no reason for differential rates. These States constitute the difficulty. I have recently, in my report above referred to, made proposals on this matter, to which, I understand, the Commissioner has taken objection on political grounds.

We have been trying in vain to ascertain the cause of the falling off in the consumption of excise ganja. We have failed to find out the reason of this or what the people have taken to instead. The consumption of liquor was falling off too. We have re-established outstills along the frontier, because we found Gurjat liquor was competing successfully with ours.

* Vide No. 165-T., dated 19th October 1878.

† No. E. $\frac{1}{2}$ 4, dated 6th September 1889, para. 10.

15. *Evidence of the HON'BLE F. R. S. COLLIER, Magistrate and Collector, 24-Parganas.*

1. As Collector of several districts, I have had opportunities of obtaining information regarding the matters connected with hemp drugs.

2. Yes.

The drugs are known as siddhi or bhang, charas and ganja in this district.

3. It grows in Murshidabad, Jessore, 24-Parganas, and is abundant in Jessore.

4. Bhang or siddhi. These refer to exactly the same plant.

5. I am unable to answer the question fully; but it appears to flourish in the alluvial tracts of Lower Bengal.

6. Ordinarily dense.

7. Yes; but not in this district.

8. I am not aware of any such increase.

9. I am not acquainted with the methods of cultivation.

10. No; the ganja cultivators are of the same class as other agricultural cultivators.

11. Not so far as I am aware.

12. Not so far as I am aware.

13. The cultivation is restricted to the districts of Rajshahi, Bogra, and Dinajpur, known as "Naogaon ganja mahal." The districts were selected, I think, for their peculiar soil. I think a soft loamy soil with adaptability for irrigation is necessary for the cultivation of hemp for producing ganja. Its cultivation would be impossible, I think, in marshy land.

14. (a) In the Rajshahi, Bogra and Dinajpur districts.

(b) No.

(c) Illicitly prepared in this district, but the quantity is very small.

15. Only from cultivated plants different sorts of ganja are manufactured. I do not know much about the preparation of ganja and charas. Siddhi or bhang is prepared illicitly from the wild plants. The leaves are removed from the plants when they are flowering and then dried in the sun. After this process it is powdered and drunk after mixing it with water, milk, sugar, and spices. Ganja and charas are only smoked, generally after mixing with tobacco.

16. (a) Prepared to a very small extent in this district.

(b) Yes.

(c) No.

17. Ganja is prepared by the ordinary cultivators, both Hindus and Muhammadans. Siddhi is illicitly prepared by all classes of people who drink it.

I do not know what classes of people prepare charas.

18. The drugs deteriorate by keeping and lose their effect in time. Ganja and siddhi keep two or three years and charas four to five years.

The evaporation of narcotic matter causes deterioration.

If the drug is kept hermetically sealed in tin boxes, I think it might prevent deterioration.

19. Used only for smoking as far as I know.

20. Charas used to be smoked by both the upper and lower classes of people, but now its use is almost confined to a limited number of the latter. The consumption of charas in this district is not more than 30 seers per annum, and the number of smokers of this drug is not more than 300. Ganja is smoked generally by people of the lower castes, who have much outdoor work, such as boatmen, fishermen, and coolies, and by a limited number of the upper class in the Barasat subdivision. I think about 75 per cent. of the adult population of the labouring lower class of people smoke ganja.

21. In this district round ganja is prepared. Flat ganja is not used at all. The consumption of chur is very little.

22. Foreign. Nepal charas is imported from Amritsar.

23. Not as far I am aware.

24. Bhang drinking is prevalent among all classes of people. It is specially used by the inhabitants of Behar residing in this district. I think about 40 per cent. of the people drink siddhi or bhang.

25. The annual reports show that the consumption of ganja is falling off year by year. The consumption of siddhi shows an increase. In charas the increase of consumption is nominal. The vendors of this district formerly used to obtain charas from Calcutta retail shops in small quantities, but now they are importing it direct from Amritsar, and are selling it wholesale to the vendor of the other districts.

Year.	Ganja.	Siddhi.	Charas.
	Mds. Seers.	Mds. Seers.	Mds. Seers.
1888-89 . . .	185 35	37 31	... ..
1889-90 . . .	163 19	43 9	... ..
1890-91 . . .	172 29	46 5	0 25
1891-92 . . .	177 2	56 29	0 31
1892-93 . . .	173 26	60 26	1 25

26. (a) 70 per cent.

(b) 4 per cent.

(c) 25 per cent.

(d) 1 per cent.

27. These are mainly taken from the lower castes who have a good deal of rough outdoor work, such as Bagdi, Podh, Behara, Chamar, Mallah, Dhangar, Dulia, Dome, Methar, Boistab, Sanyasi, Koibarta, etc. They are generally moderate consumers.

28. (a) Ganja, two annas weight, price two pice. Charas, three annas weight, price one and a half annas. Siddhi, one tola, price two pice.

(b) Ganja, one tola, price four annas. Charas, one tola, price eight annas. Siddhi, two and a half tola, price five pice.

29. Ordinarily with ganja and charas prepared tobacco is mixed, and with siddhi spices, sugar, and milk.

I am not aware of any thing exceptionally mixed.

I have heard that dhatura seeds are used with ganja to increase its intoxicating power, but I have not seen any one use it.

In case of tobacco with charas and ganja the object is to soften the narcotic effect and to give a better flavour. Spices, etc., are used with siddhi to improve the taste and also to increase its intoxicating effect.

No. I do not know "bhang massala."

30. (a) Ganja and charas are smoked generally in company. No privacy is observed in case of drinking siddhi.

(b) It is mainly confined to the male sex and not to any special time of life.

(c) No.

31. (a) Yes.

(b) Yes.

(c) Not to the same extent as alcohol or opium.

32. The consumption of ganja and charas are not required by any social or religious custom. Bhang is drunk partly as a religious and more as a social custom on the fourth or last day of the Durga Puja, as it is believed that success in life results thereby, and the name itself, siddhi, implies success. It is popularly believed to have been the favourite drink of Siva, and is therefore used as an offering to him by devotees. The use is generally temperate, and there is no likelihood, of its leading to the formation of a habit.

33. The smoking of ganja is held in disrepute, but such is not the case with siddhi drinking or charas smoking. The sentiment against ganja smoking is, I think, due to the fact that its use is confined generally to the lower castes. I am not aware of any custom of worshipping the hemp plant on any occasion by any sect of people.

34. Yes. The labouring class of the population use ganja or charas as a stimulant to enable them to do hard work. They cannot possibly give up the practice without some substitute. Bhang again could not be given up by the habitual consumers without aggravating the complaints to prevent which they had recourse to its use.

About 50,000 of the labouring classes of this district use ganja as a stimulant for hard work. There are no less than 10,000 habitual consumers of siddhi; but the charas smokers are not more than 300 in this district.

35. It is feasible to prohibit the use of charas but not of ganja or siddhi. These two may be consumed illicitly. I doubt if the prohibition could be enforced with regard to them. The prohibition would occasion serious discontent among the consumers, but that would not amount to a political danger. The prohibition would be followed by recourse to other deleterious drugs.

36. Alcohol is to a very small extent substituted for these drugs. Amongst the better classes, as stimulant, alcohol is considered superior. The use of these drugs is gradually diminishing. Tari to some extent has taken the place of ganja among the lower classes of people, for it stimulates, and at the same time satisfies hunger, although a little costly.

37. Yes. The effect of charas smoking is considered to be milder than ganja smoking.

38. No.

39. Siddhi drinking is less injurious than smoking charas or ganja. Smoking produces a strong instantaneous effect, but drinking is decidedly an easier method of consuming a large quantity at a time.

40. (a) Yes.

(b) Yes.

41. (a) Believed to be both.

(b) Yes.

(c) Yes.

(d) The use of ganja is supposed to enable a man to concentrate his mind on a subject.

Labouring class, 75 per cent. of them. The moderate use is referred to.

42. The moderate use is harmless, as it has no after-effect on the system.

43. Yes.

44. (a) It invigorates and causes a pleasant feeling of intoxication.

(b) Yes.

(c) Yes.

(d) No.

(e) Yes; it does when taken in the form of siddhi.

(f) One hour in case of ganja and charas and three to four hours in case of siddhi.

(g) No.

(h) Produces longing in case of habitual consumers.

45. (a) No.

(b) In case of intemperate use it does.

(c) No.

(d) Yes, both in case of intemperate use.

(e) No.

(f) The moderate use does not deaden the intellect or produce insanity. It is said that adulteration of the drugs with other poisonous ingredients, such as dhatura, etc., produces insanity.

(g) It has been ascertained that of the insane persons in the district, only 19 are considered to have become so by the use of ganja. Of these 19 only one is reported to be violent. On sufficient enquiry, and as well as from the confession of these persons, it was elicited that in the majority of cases their insanity was due to other causes, such as family misfortune, etc., and some have taken to ganja after being insane. In four cases no other cause for their insanity could be ascertained, except the excessive use of the drug.

46. Habitual excessive indulgence causes the peculiar frenzy which causes Orientals to run amuck.

47. No.

48. Same as above.

49. (a) Yes.

(b) It is used so by the lowest class of prostitutes who frequent mēlas or fairs.

(c) I am not aware.

(d) No.

50. Same as above.

51. No.

52. No.

53. No.

54. No.

55. No.

56. I have no personal knowledge of the admixture of other substances than what I have already noted.

57. I do not know that ganja and charas are eaten or drunk.

58. The excise administration in respect of hemp drugs is working well, and I am not prepared to suggest any improvement.

60 and 61. I think that there is sufficient control, and have no suggestion to make for the modification of the system.

62. I would not suggest any changes in this respect.

63. No.

64. No.

65. (a) Yes.

(b) Yes.

66. Yes; for flat and round have twigs which the chur has not. Each kind of ganja should be taxed in proportion to the narcotic matter that each is found to contain.

67. Yes, as remarked above.

68. There are licensed shops for the sale of these drugs; but ordinarily they are not smoked or drunk on the premises. The shops are not disreputable. Generally *mudi* shopkeepers are the licensed holders of these shops.

69. Ordinarily the wishes of the people are not consulted or considered when a shop is opened in any locality. On the application of vendors and local inhabitants, licenses are granted after due enquiry at the auction settlement, held with the sanction of the Board. I do not think it is necessary to consult or consider public opinion, as these shops are not a nuisance.

70. (a) No.

(b) Yes; in respect of ganja and charas but not of siddhi. The latter is used to some extent illicitly, but the use is not general.

Oral evidence.

I have served for 22 years in Bengal and Behar. The paper No. 247 submitted by the District Board of the 24-Parganas was drawn up by a Sub-Committee, under instructions received to the effect that a Sub-Committee should be appointed to report. The paper was not submitted to the District Board.

Question 15.—My statement regarding the preparation of siddhi from the wild plant applies to the 24-Parganas, where it certainly grows. The plant grows freely in all the alluvial districts. I am informed that it does not grow in the laterite districts. But I cannot vouch for that. I cannot say at present when the crop comes up. I understand that the plant should not be used before paying duty. Therefore I call this preparation illicit. I believe that for a person even

to prepare a small quantity and use it without paying duty is illicit. We have specially licensed shops for the sale of siddhi in the 24-Parganas. Apart from the sum paid for the license-fees there is a direct duty on siddhi. That is, the stuff is sold from the godowns in Calcutta; and I understand that the price includes duty.

Question 35.—The other deleterious drugs would probably be opium. I cannot say that I know of any other drug that would probably be substituted for ganja. I cannot say that I think opium is more deleterious than ganja. Of the two I think ganja is the more deleterious. The basis of this opinion is that I am under the impression that taken to excess it occasionally causes madness. This is little more than an impression. But from what I have heard of cases of madness and seen of reports as to the causes, I have formed the impression that ganja was frequently an exciting cause. Whether there may not have been a tendency to lunacy before the ganja habit was indulged in, I am not prepared to say.

It is said also that if indulged in to excess ganja makes a man lazy and disinclined to work. I cannot vouch for this from my own experience. On the other hand, taken in moderation, it enables persons to perform out-door work.

I think that crime is very rarely connected with ganja. Occasionally violent crime may be due to ganja. I have heard of such cases. But I do not think that any one has come before me. My experience certainly does not show the connection of ganja with crime.

I think the prohibition of bhang would not be feasible. It grows too widely over the province. I do not see necessity for attempting such prohibition. I am not aware that the abuse of the drug is at all common so as to render such prohibition advisable. As regards ganja, although there are instances of abuse of smoking it, yet I think it is extremely useful to the large body of the working population. It is consumed by a large number of men who have rough out-door work to do. It enables them to do work which they could not do without it. In this view I think prohibition is not called for, and unless we are prepared to enforce prohibition in Native States and in Nepal, I do not think prohibition would be practicable with us. I cannot say that I consider further restriction called for. I do not see what further restriction you would have, unless you were to raise the price considerably, which would press hardly on the poorer classes. I think that the limit of taxation has been reached. One symptom of this is that consumption is decreasing. The duty is high and the class of persons who use the drug is poor.

16. Evidence of MR. C. R. MARINDIN, *Magistrate and Collector of Shahabad.*

1. Enquiries from the vendors and consumers of the drugs and from persons having a taste for scientific researches.

2. Yes. The hemp is the name of a genus of plant in the Linnæan system; class *Dicæcia*; order *Pentandria*, male and female; Pharmacopœal name, *Cannabis*.

(1) Bhang, *bang*, *subzi*, and *siddhi*.

Classical names.—Arabic *Kanab*, from which the Latin *Cannabis* is derived. *Cannabis indica* and *Cannabis sativa*.

The hemp is the *hushish* of the Arabs.

Persian names known among the Musalmans: *falaksair* and *waragul khyat*.

(2) Ganja, *ganja*.

(3) Charas, *charas*.

3. Monghyr and Bahraich (Oudh).

4. (*Vide* reply to question 2.) All refer to the same plant.

5. Damp climate, moist soil, and rainfall.

7. No.

10. The vendors of narcotic drugs are *sunris*.
12. It grows as a weed in Bhagalpur, and the ryots are glad to get it cut and cleared off their lands. I have not known any case where it is especially cultivated.
14. No.
18. All. They lose their effects in time, and keep good with ordinary care for a year only. Causes of deterioration have not been ascertained, and no preventive measures suggested.
19. Yes.
20. All classes of Hindus, especially the villagers, nearly one-third of the population, smoke ganja. Charas is not used in this district.
21. Flat.
22. Charas is not used in this district.
23. Never in this province.
24. All classes of Hindus, about one-fourth of the population, eat bhang in winter, and drink in summer, as a cooling beverage. It is the nectar of the Hindus, who give it the name of Mahadeo's *buti*, or the drug of Mahadeo of the Hindu Trinity.
25. On the increase.
26. (a) One-half.
(b) One-fourth.
(c) One-fourth.
(d) One-twentieth.
27. (a) and (c) from all classes of Hindus, and (b) and (d) from the orders of mendicants (*sadhus* and *jogis*). No particular habit of life or circumstances leads to the practice.
28. Ganja—(a) Half an anna.
(b) Four annas.
Bhang—(a) One pice.
(b) Half an anna.
29. Ganja is used in smoking with tobacco.
Bhang—(a) Ordinarily by the poor. Pepper, and occasionally molasses.
(b) Exceptionally by the rich. Bhang sherbet—ingredients: sugar, milk, rose water, almond, cucumber seed, coriander, cardamom, and pepper.
Massala or majum—ingredients: ghi, milk, sugar, almond, pistachio. Dhatura (*stramonium*), used with bhang rarely.
The object of the admixture of the above ingredients is to make the drug agreeable, and that of dhatura (*stramonium*) to intensify the narcotic effects.
30. Generally in company. Confined to the male sex, but not to any time of life. None consumed by children.
31. (a) Yes.
(b) Probably.
(c) Yes.
32. None in this province. Consumed excessively by all classes of Hindus on the occasion of the Holi festival.
33. With indifference. I think it probable that among the fakir and sadhu classes there may be strong prejudices in favour of the consumption of the drugs.
34. Only to the mendicants, the *sadhus*, and the *jogis*.
35. (a) Yes.
(b) Yes.

(c) With difficulty.

(d) and (e) Prohibition would cause a certain amount of discontent. I do not say it would amount to a political danger, but considering that the class whom I believe to be most strongly addicted to ganja, namely, the religious mendicant class, whose movements, preaching, and proceedings it is difficult to control, I think it would be impolitic to give them this handle against Government to roam disaffected among the people, especially just now. I am in favour of limiting the number of ganja shops much more strictly than is done now, but not of total prohibition.

37. Charas is not used in this district.

38. Flat ganja is the most efficacious.

40. Bhang is used by the Vaidas or the indigenous school of physicians. It is used in the treatment of cattle-disease.

According to native *materia medica* the medicinal properties of bhang are:—

(i) laxative, (ii) diuretic, (iii) hypnotic, (iv) aphrodisiac, (v) refrigerent, and (vi) anodyne.

41. The moderate use of bhang is said to be beneficial in its effects—

(a) as a food accessory or digestive.

(b) to give staying power under severe exertion or exposure, or to alleviate fatigue.

(c) as a febrifuge.

(d) as a cure for piles.

All classes of Hindus. Moderate habitual as well as occasional use.

42. Yes.

43. The consumers of the hemp, moderate or excessive, are always inoffensive to their neighbours.

44. Stimulant. It is refreshing and produces intoxication. Ganja allays hunger, but bhang creates appetite. The effect of bhang lasts four hours and that of ganja five hours.

The after effects are giddiness, dimness of sight, and laziness.

45. The habitual moderate use of bhang is harmless. But the habitual moderate use of ganja and the excessive use of bhang affects physically, mentally and morally; impairs the constitution, injures digestion, and causes loss of appetite.

The use of ganja causes bronchitis and asthma.

It impairs the moral tone and moral courage, and induces habits of laziness. The excessive use deadens the intellect, and produces insanity of the type of dementia, temporary or permanent. The symptoms may be re-induced by return to the use of the drugs.

47. No.

48. See reply to question 45.

49. Ganja and bhang are used as aphrodisiacs by prostitutes.

The drugs tend to produce impotence. They are stimulant in the primary, and sedative in the secondary stage.

51. (a) A good many are said to be. It is a frequent piece of evidence in a bad livelihood case that the accused consumes ganja.

(b) With crimes of violence.

53. Yes; I have known cases where the consumption of the drug has led to temporary homicidal frenzy.

54. I cannot say, but see last answer.

55. I have not known any case of this sort.

56. *Vide* reply to question 29.

57. Neither eaten nor drunk in this district.

58. I think it is capable of improvement in the direction of restriction. At present there are too many ganja shops. The numbers should be largely reduced. They should only be established in towns and really large villages. I would discourage the use of ganja by these means as much as possible among the rural population, and only keep sufficient shops to supply the large floating population of the province, especially the mendicant class, whose addiction to the use of the drugs we cannot hope to restrain.

Oral evidence.

Question 1.—I entered the service in November 1872. I have had experience in Behar, Bhagalpur, and North-East Bengal, principally Dinajpur.

Question 12.—The hemp plant is found chiefly, I believe, in the northern parts of the district and in the high lands of the villages which are or have been under cultivation. It grows in disused lands to a great extent. I have never seen it on the "churs." It is not a forest plant which grows in jungle or unreclaimed land. I have never seen it in such lands, though I should not like to say it does not grow there. The plant is cleared off by the people who collect it for the wholesale dealers. I believe there is a good deal of export from this district. I am told that a good deal of the plant which is exported from this district, generally for Calcutta, comes from Purnea. Some may be taken to Monghyr, where there is a warehouse under Government supervision for the supply of wholesale vendors in other districts. I do not know of any other such warehouse in the province. Our warehouses in the Arrah district draw their supply from the Monghyr warehouse. They say that the ryots do not make any money out of the wild plant. They are glad to get it cleared away for nothing from their lands. I have never heard of any import of the wild plant from Nepal. The Nepal State keeps shops along the frontier, at which our people go and buy the drug for their own use. What form of the drug they buy I cannot say: it is probably ganja.

Question 20.—The ganja in Arrah is chiefly consumed by Brahmans and Rajputs. It is also taken by other classes of Hindus, specially labourers. The Musalmans are not large consumers. The figure given in my written answer would require verification. In any case one-third of the total population would be more than I meant. The use is probably not as common among the villagers as among the town population. Ganja is very generally consumed by the Kol tribes locally known as Karwars on the Rhotas plateau.

Question 25.—My statement that the use of the drugs is on the increase is based on information gathered in the course of my enquiries. I should think it was correct, and it relates to the Arrah district.

Question 35.—In the words "especially just now" I had the Gaurakshini agitation in mind most prominently, possibly the opium question also.

Question 45.—Cases are known where the drug has produced dementia and homicidal tendency. I can say that this answer is based on my personal

experience. The cases of insanity I have in mind are the two cases which went into the Patna lunatic asylum, and which I have enquired into and reported on for the Commission. But apart from these cases I have a general conviction gathered in the course of my service, but I could not give any specific instances.

Question 51.—The evidence is generally given, I think, that the man is living beyond his means and has to resort to theft to supplement his income. I may have enquired as to the amount used and the cost to the consumer, but I cannot recall the fact. I certainly do not do it as a rule. It is very improbable that it would be tested in such cases whether the use was moderate or excessive, and the evidence might be called, to use a native phrase, of a "mamuli" sort. It is a bit of evidence which I generally disregard. I certainly should not run in a man because he smoked ganja.

Question 53.—Two cases I had in my mind occurred when I was at Bhagalpur last year. One came from the Sonthal Parganas, and I learnt about it when I visited the Jail. The other was tried by one of my Magistrates in Bhagalpur and came under my notice as District Magistrate. In the Bhagalpur case the connection of the hemp drug with the crime appears on the record. It occurred about August 1893, in the sub-division of Supole, and the case was ultimately tried in the Sessions Court. Regarding the Sonthal Parganas case, I am not certain whether the hemp drug appeared on the record or whether Dr. Moorhead, who was in charge of the Jail, formed the opinion that the man was an habitual ganja smoker. This case was also tried in the Sessions Court at Bhagalpur. I cannot remember any other specific cases. After writing my answers I made enquiries in the District Magistrate's record room at Arrah, and the office could not put their hands on any case during the last five years in which the hemp drugs were connected with heinous crime.

Question 58.—I have no reason to suppose that use by the rural population is more injurious than use by town dwellers. What I have in view is to leave the habitual consumers who cannot do without the drug the means of obtaining it, and to limit the number of shops so far as to remove temptation from occasional consumers. Towns and large villages should be selected for shops, because there are more likely to be a large number of habitual consumers in such places, and the people of the surrounding villages go there for market. There are a good many ganja shops in small villages at present. I have seen them in villages of 50 or 60 houses. I have not noticed any evil effects on the population of those villages, but I advocate the change on general principles. I do not propose that the location of shops should follow a hard-and-fast rule. The circumstances of districts or tracts might require relaxation of the general rule. I think we could do with fewer shops, and I have indicated the principle on which they might be reduced. To carry the principle too far and ignore the necessity which exists among the agricultural classes for the drug would occasion considerable discontent and would also be likely to lead to illicit consumption. This is more likely to happen where the spontaneous growth is common. It has also occurred to me that bhang is less deleterious than ganja, and that the reduction of the ganja shops might be compensated by an increase of the bhang shops. In Arrah there are, I think, 37 bhang shops distinct from ganja shops. There is no spontaneous growth to speak of in that district.

The illicit consumption of ganja would probably be supplied by illicit cultivation of the plant and also by importation probably from Nepal. I have not enquired into the difficulties that lie in the way of such cultivation and importation. I also think that the existence of necessity for the drug among the labouring and agricultural classes would justify the supply of the legitimate demand apart altogether from the question of danger to the revenue from illicit consumption. I think there is a legitimate demand among the Hindus in connection with their religious festivals as well as among the labouring and agricultural classes.

The view I formed with reference to the circular which was issued by Mr. Westmacott with the object of exterminating the wild growth in village lands was that such extermination was not practicable, at all events in a district like Bhagalpur, and that the attempt to carry it out would cause a great deal of harassment and annoyance to the villagers. The people are glad to have the plants removed from their lands it is true, where it is growing in very large quantities, but they have no special desire to have one or two plants removed from their "baris," where they do no harm.

As the plant grows in great abundance in Bhagalpur, I do not think the prohibition could be carried out without harassment and interference by the police, because, although the existence of the plant is evidence against the person in whose lands it grows, a large amount of labour would be required to exterminate it, and therefore the people would not be likely to undertake the labour of doing it themselves.

Appendix to MR. MARINDIN'S evidence.

Abstract of the records sent by Mr. Marindin and referred to in his oral evidence.

I

EMPRESS *versus* CHAMAN SINGH.

This man, Chaman Singh (Rajput, cultivator), murdered his wife on the morning of 19th June 1893, but was acquitted on the ground of insanity by the Officiating Sessions Judge of Bhagalpur on 11th September 1893.

There is no mention of ganja in the "First Information Report" of the police or in the proceedings of the Committing Magistrate. The Magistrate records: "The defendant was all along a sane man, and he always pulled well with his wife, who was generally known as a woman of good character. His cousin and uncle, Babuan Singh and Kasi Singh, who live very close to his house, deposed that, just before the occurrence, he asked his wife to cook for him, as he took no food on the night, and his wife said she will do it a little after. Besides this, there is nothing to show that he had even any altercation with his wife."

Before the Sessions Judge the uncle, Kasi Singh, said of the accused: "He was in the habit of taking ganja and bhang occasionally. He took it at an interval of two or three days; but I cannot say if he took it that day. When he took it he became bad-tempered. I never take it." On the other hand, the cousin, Babuan Singh, deposed: "He never took ganja or bhang. If my uncle Kasi says so, I can only say I never saw him." Another witness says: "I never saw him take ganja or bhang."

There is no other mention of ganja in the record of evidence. In his letter of 17th July 1893 to the Civil Surgeon, the Sessions Judge specially asked whether the prisoner "appears to be the subject of mania due to taking hemp in any form." This special question was not answered by the Civil Surgeon, nor was he asked about this matter when examined as a witness in Court. The Civil Surgeon's evidence is merely, "I believe him to be a man of unsound mind. His appearance is that of a man suffering from monomania. His mania refers only to his wife. He admits having killed his wife, and expresses no regret for having done so, although he admits she had done nothing wrong. He says it came into his mind that he should kill her, and if she were alive again, he would kill her."

The judgment makes no reference to ganja, but says: "There is no doubt that the act which accused is shown to have committed was the first outbreak of dangerous homicidal mania, and that that mania still continues."

II

EMPRESS *versus* PITHU SONTAL.

Pithu Sontal was charged with murder of his wife, but was sent to the asylum by the Sessions Judge of Bhagalpur on 11th September 1893 as "of unsound mind and incapable of making his defence."

Before the Committing Magistrate he stated: "I was told by my wife that Bhima Paramanak and Chota Dhanoo of my village had had sexual intercourse with her. I heard this and struck her;" and on a later date he said: "I suspected, when deceased went out, that she went to have sexual intercourse with some other man. I went and asked her. She said she had gone to answer a call of nature. I accused her of inconstancy. She said nothing, so I struck her. [Then says] my wife admitted that Bhima Paramanak and Chota Dhanoo had had sexual intercourse with her. It was on this I struck her. I have no witness to prove this."

The evidence shows, however, that when asked at the time why he had killed his wife, the prisoner said he did not remember, and also that he had shown signs of madness the previous day. The Committing Magistrate says: "The acts of madness referred to appear to me to be an after-thought, and the Civil Hospital Assistant deposes to having watched accused from the day he was brought in and noticed no signs of lunacy whatever."

It may be noticed, however, that the Hospital Assistant in his evidence says: "He is very quiet and silent, due to depression of the mind."

There is no mention of ganja in the whole record; nor is there any explanation assigned by any witness of the alleged madness, except that one witness says: "Accused's only child died during the Baudna festival."

Before the Sessions Judge the prisoner seemed incapable of making his defence. The Judge, therefore, ordered that he be kept under observation until the following Sessions. At the later Sessions the Civil Surgeon said: "I consider that he is not capable of understanding or making

his defence, nor has he been so at any time during the two months I have seen him.* * He appears to me to be suffering from melancholia." There is no mention of ganja on the record.

III.

EMPRESS *versus* GANGA SONTHAL.

Ganga Sonthal, a cultivator, was charged with murdering his mother, Durgi Sonthalin, who had married a second time, and also his own sister, a child of 9 or 10 years, named Gora Sonthalin. Two other persons were also said to have been assaulted by him. This was on 7th January 1893 (Saturday) about midnight. He was sentenced to death; but the High Court directed that evidence be taken as to his sanity. The Civil Surgeon testified: "From the beginning of my observation, or very soon after, he appeared to me to exhibit symptoms of insanity. * * His demeanour was that of a lunatic. I consider that this state of mind continues." On this the High Court, on 26th April 1893, set aside the conviction and sentence on the ground "that the accused

is of unsound mind and incapable of making his defence."

At the trial Durgi's servant Arjun said: "The prisoner was not drunk. Before the Pergunait, the prisoner said Bhagwan had told him to kill the people. * * I never saw any signs of insanity about him." Another witness, Prithu, says: "When I saw the prisoner that night, I did not see any signs that he had been drinking. He never showed any signs of insanity." Later he says: "During this festival the Sonthals drink, and they had all drunk on the Friday." Three other witnesses said, they saw no signs of drink in the prisoner that night.

The prisoner simply denied the murder, and said he could not explain the blood-stains on his clothes.

In the committal order the Magistrate says: "It appears that on a night during the Bandua festival on 7th January, when all Sonthals, whatever they say, are more or less drunk, the prisoner committed the murders with which he was charged." * * "In fact, it may be said that he generally ran amok as Malays are said to do."

There is no mention of ganja in the record.

17. Evidence of MR. K. G. GUPTA, Commissioner of Excise, Bengal.

1. During my 20 years' service, I have worked in various parts of Lower Bengal and Orissa, and as Subdivisional Officer and afterwards as District officer had to administer excise in my jurisdiction. Latterly I was Secretary to the Board of Revenue for four years and had charge of excise. In 1891 I acted as Excise Commissioner for four months, and have been permanently appointed to the post since March last.

2. The definitions may be accepted.

The three varieties of ganja defined here have reference to the Rajshahi drug, which is almost exclusively used in these provinces. The flat ganja retains the larger twigs and the round ganja the smaller ones, while chur has only the detached flower tops. There is thus more woody matter in round than in chur, and most in flat.

Gurjat, which is treated as a separate ganja, is used to a small extent in Orissa. In shape it is like flat ganja.

3. It grows spontaneously everywhere in Lower Bengal as well as in Behar and Orissa. It is somewhat scarce in the districts of the Chota Nagpur division; but elsewhere it is generally abundant, especially in Champaran, Monghyr, Bhagalpur, Purnea, Rungpur, Jessore, etc.

4. General name bhang.

Siddhi (specially in Lower Bengal).

Patti or subji (in Orissa).

Thandai (cooler) (specially in Behar).

5. It flourishes in a damp loose alluvial soil. The amount of rainfall is not so material, provided there is sufficient moisture. It is thus found abundantly in such distant localities as the extreme North-West of Behar (Champaran) and the North-East of Bengal (Mymensing). It does not like a dry laterite soil, but grows luxuriantly in the *chur* lands of the Ganges and other rivers, which are submerged during the rains. It is an annual plant.

6. Ordinarily dense. Cultivators and indigo planters do their best to keep down its growth.

7. (a) Yes.

(b) No.

(c) No.

(d) I am not aware as regards (d). See my memorandum as Excise Commissioner.

8. The area fluctuates considerably from year to year, but there is little change on the whole. See official note.

9. *Vide* H. C. Ker's report.

10. (a) No, they do not form a separate class.

11. No.

12. Yes. In the Gurjat States of Orissa, in Hill Tipperah, and in Nepal. The practice is very general in the former; and smuggling of this drug seriously affects the ganja revenue in Orissa. That produced in Hill Tipperah is rarely brought into British territory. The extirpation of the male plant is not so thorough as in the case of the Rajshahi drug; but even in the ganja tract the male plant cannot be absolutely eradicated. Gurjat ganja is decidedly inferior in quality, containing more leaves and seeds and less narcotic matter than the Rajshahi drug. It is, however, much cheaper, the price being about one-sixth that of the Rajshahi drug.

13. See official note. Cultivation restricted to a small tract in Rajshahi, Dinajpur and Bogra.

14. (a) Yes.

(b) No.

(c) Yes.

See official note.

15. As regards preparation of ganja see H. C. Ker's report. No ganja is made from the wild hemp plant.

Bhang does not require any special preparation. The plant is cut down and allowed to dry for a day or two. The leaves are then shaken off and collected with bits of flowers. These are kept in bags and used as bhang. Bhang is collected for the market in Monghyr, Bhagalpur and Purnea

and stored in the licensed golas of the two first-named districts, which supply the whole province.

The plant germinates after the rains and comes to maturity in the following May.

Bhang is gathered in that month and also in June and July. Ganja and charas are always smoked and bhang is always drunk. Majum, which is a confection made from bhang, is eaten. Siddhi kachauri is a kind of fritter in which bhang is used.

16. (a) Bhang in small quantities is generally made by the people in their houses, especially where the wild plant is abundant, as in the rural areas of certain districts.

(b) Yes.

(c) No.

17. Ganja, by cultivators of ganja. Bhang, by wholesale dealers, and by villagers generally.

Majum
Siddhi kachauri } by confectioners.

18. Ganja—

Deteriorates by keeping. Fresher the better. Most valued during first year: less so in two years; in fact, is not sold after the first year if new ganja is available; absolutely unsaleable after the two years; this with ordinary care, without which deterioration may take place earlier. Damp and natural decay cause deterioration. Precaution is taken against damp. The question of preserving the active principle of the drug is under consideration with reference to Dr. Prain's recent enquiries.

Bhang—

Narcotic property deteriorates, but the value of bhang as a medicine is enhanced by age. Three to four years. Old bhang is much esteemed as a palliative in bowel complaints.

Charas keeps longer than ganja.

19. Yes, Gurjat ganja is, however, drunk in the same way as bhang by the priests attached to the temples of Jagannath, Bhuvanewar and Satyabadi in Puri.

Ganja is occasionally chewed by ascetics.

20. The consumption of charas is confined to the residents of towns in Central and Western Bengal. It is difficult to give the exact proportion of consumers. Some idea may be formed from the fact that in 1892-93 11 maunds 26 seers 12 chittacks, or, say, 12 maunds of charas, were consumed against 4,711 maunds of ganja (excluding the quantities sent to the North-Western Provinces and Oudh); and assuming that charas is twice as effective as ganja, the proportion of charas consumers to ganja-smokers would be 24 to 4,711 or 1 to 196.

Ganja is used by all classes, though in varying proportions, throughout the province. Hindu mendicants (sadhus, sanyasis, etc.) use it to a man, as do the priests and attendants of Hindu temples, especially of those that are dedicated to Siva. In Lower Bengal boatmen, fishermen and others who are constantly exposed to wet and inclement weather, palki and dooly-bearers and coolies who have to perform great physical exertion, freely use ganja; also cooks and artisans. Its use is considerable among cultivators, but limited among the bhadro log or respectable castes. Its use is equally common among Hindus and Musalmans.

In Behar, however, Musalmans do not much indulge in ganja. Of the Hindus its use is rare among the poorer classes (who seem to be more addicted to tari and cheap country liquor), but is general among the middle classes, comprising Brahmins, Rajputs, and Babhans. Artizans of all classes freely consume it.

	Mds.	S.	C.
Total consumption in 1892-93	5,451	14	0
Deduct quantities sent to North-Western Provinces and Nepal	740	19	0
Consumption in Bengal	4,710	35	0
Population	71,271,080		

Smallest consumption of a moderate smoker, 1 anna or $\frac{1}{1280}$ of a seer per diem.

The quantity shown as consumed is thus sufficient for 660,813 or 9 in 1,000 of the total population, which is less than 1 per cent.; but the average quantity consumed by a smoker is probably higher, and the proportion then becomes still less. On the above assumption (1 anna per diem per smoker) the proportion of smokers to total population is as follows in the undermentioned districts where the consumption of ganja is large:—

Dacca	: : : : : 15 in 1,000
Mymensing	: : : : : 15 in 1,000
Patna	: : : : : 12 in 1,000

21. In the hands of the consumer all ganja is reduced to chur at the time of smoking. Yet one variety is preferred in one district and another in another district, e.g., round is favoured in Calcutta, 24-Parganas, Nadia and the districts of the Burdwan and Orissa divisions, and flat elsewhere. But this preference for one sort is more a matter of habit and is not based on any real difference in quality.

22. All foreign. Obtained from Amritsar (Punjab) and Mirzapur (North-Western Provinces), where they are imported from Central Asia.

Formerly some charas used to be brought from Nepal, but the trade seems to have died out.

23. Wild bhang is said to be smoked in Dacca and Mymensing, but only by very poor people. The extent of such use cannot be large.

24. Bhang is eaten in the shape of majum or siddhi kachauri. In these forms it is used by the well-to-do classes in town areas, but the consumption is very small. Out of a total of Rs. 1,984 realized from majum licenses in 1892-93, Patna contributed Rs. 688, Calcutta Rs. 559, and Cuttack Rs. 245. The use of bhang as a drink was at one time general in Lower Bengal, but is now very much restricted owing to progress of education and breaking up of old habits, and also to the spread of a taste for imported spirits. In Behar, among the higher and middle classes, it is still a favourite drink, though the poorer classes prefer tari and country spirit.

25. Use of ganja is on the decrease owing to enhanced cost caused by increasing taxation and restrictions on manufacture.

Use of bhang is also less general, due to progress of education and to losing faith in ceremonies and celebrations of which the consumption of bhang formed a feature.

26. It is impossible to state the proportion, even approximately, without a census of the consumers. But it may be said generally that the great majority of consumers come under (a). Sanyasis, sadhus and other mendicants belong to (b).

27. Fishermen, labourers, coolies, boatmen and others who smoke ganja as a matter of necessity

are habitual moderate consumers; while mendicants, including sanyasis and sadhus, who lead idle lives, are, as a rule, habitual excessive consumers, the idea being that ganja-smoking helps their meditations. Occasional moderate smokers are beginners, and those who join in any rites in which ganja forms a votive offering, as in the worship of Trinath in Eastern Bengal.

Ganja.	Charas.	Bhang.
28. (a) Quantity, $\frac{1}{16}$ to $\frac{1}{8}$ tola, cost 3 to 6 pies.	$\frac{1}{16}$ tola, cost 6 pies.	$\frac{1}{4}$ to $\frac{1}{2}$ tola, cost 5 to 6 pies.
(b) Quantity 1 tola, cost 4 to 6 annas.	1 tola, cost 8 annas.	2 tolas, cost 2 annas.

29. Tobacco is almost always mixed with ganja in the proportion of one-half or one-third. Dhatura seed is very occasionally used, and only by debauched smokers, to increase intoxication.

Various ingredients are mixed with bhang, such as cucumber seeds, ginger, sugar, spices, milk, curd, etc.

30. Ganja and bhang are generally consumed in solitude, except on festive occasions. It is not, however, unusual for two or three persons to sit down together to smoke ganja. The same remark applies to charas. The use of these narcotics is confined to the male sex (the exceptions being very few indeed—women who have renounced all worldly ties and also the lowest class of prostitutes), and is most common during middle life. Children seldom consume ganja or charas, but on ceremonial occasions they are often allowed to taste bhang.

31. (a) Yes.

(b) Yes, without outside restraint or compulsion. The bhang habit is mild and can be shaken off with ease.

(c) Hardly.

32. *Ganja*.—This is supposed to be the favourite drug of the god Siva, and is offered to him in all the principal Siva temples, especially on the Sivaratri night.

In Eastern Bengal, a new form of worship has been introduced in recent years, the chief votive offering being prepared ganja, which is first offered to a certain god Trinath, and is then smoked by the worshippers with some ceremony. This rite, of which ganja-smoking forms an essential part, has become very general among the lower classes. The use of bhang, both as a drink and in the shape of various confections, is general during the Durga Puja, and the drug is freely offered to guests, but the custom is on the decline. The use of ganja and bhang on ceremonial occasions is temperate, and it does not lead to the formation of the habit and cannot be said to be otherwise injurious; but Trinath Puja has certainly led to the spread of ganja-smoking among the classes who affect this worship. The 2nd Inspector, Babu Abhilash Chunder Mookerjee, has given a detailed account of these customs and ceremonies in his evidence.

33. Among the lower classes there is no feeling either for or against the use of any of the hemp drugs; but it is considered a meritorious act to offer ganja to any of the gods or to religious mendicants. The educated classes certainly regard ganja-smoking with aversion and the word "ganjakhor" is an epithet of scorn and disgust, but

perhaps less so than "matal" or drunkard. The ganja-smoker is believed to be light-headed, untruthful, and irritable.

34. It would certainly be considered as a privation to forego the consumption of any of the hemp drugs by the classes accustomed to its use. The moderate consumers derive benefit from it; and as for ganja, those in the habit of smoking it would not, without it be able, for some time at all events, to carry on their ordinary avocations with efficiency, and sickness would also result. Those who use it at their religious rites and festivals would strongly resent any action tending towards prohibition. Priests and religious mendicants would consider it a great hardship to forego the bhang or ganja they use, and would do their best to spread the idea that such action meant interference with the religion of the people.

35. It would be possible to prohibit the use of ganja or charas, but not of bhang. The importation of charas could be prohibited altogether, and although some smuggling would take place its extent would be small. Owing to the difficulties of making ganja on the sly and from any but cultivated plants, the amount of illicit manufacture could not be large. In districts bordering on Native States in which ganja is made there would be much smuggling, and it is more than probable that when manufacture is stopped in British India, such States would take to ganja cultivation regularly. With the use of ganja suppressed the consumption of bhang would increase largely. There would undoubtedly be much discontent; but I apprehend no political danger, except from the religious mendicants, who are much respected by the masses, and who may do much to spread disaffection. In Bengal proper and Orissa the prohibition of ganja would not lead to much recourse to alcoholic stimulants, as the price of liquor is there very high and beyond the means of those who now consume ganja. There will probably be greater recourse to opium.

In Behar, where outstill liquor and tari are cheap, there will probably be greater indulgence in both, as well as in opium.

The detective staff would have to be largely strengthened, and there can be little doubt that any preventive measures, in order to be effective, would cause endless harassment and inconvenience to the people—not to speak of extortion and other illicit dealings by departmental underlings.

The prohibition will be keenly felt by the poor labouring classes, whose lot it is to work hard amidst disagreeable surroundings and to expose themselves to all weathers and climates. Addiction to ganja, unlike the drinking habit, seldom ruins a man or starves his family. It does not likewise lead to vices that are usually associated with drinking. The ganja-smoker is seldom violent or boisterous, or is guilty of disgraceful conduct. He takes his drug in his house alone or with a few chosen companions, and is spared all the mischievous associations of a grog shop. It would be inexpedient to prohibit the use of ganja.

36. No. In some districts the high price of distillery liquor is said to have driven the poorer consumers to the use of ganja and opium. The result, however, is not very manifest yet.

38. No; when smoked all the woody matter is carefully removed, and in that state the original distinction between the three sorts entirely disappears.

39. Each preparation is usually put to a single use (ganja or charas for smoking and bhang for drinking), and the question of difference in effect, according as it is eaten or drunk, does not arise.

40. Ganja and bhang have occupied a leading place in Hindu pharmacy from remote ages. Bhang is used in the treatment of cattle disease—see Second Inspector's answer.

41. Moderate use of ganja appears to be beneficial to cultivators, labourers, boatmen, fishermen and palki-bearers under (b), and also as a preventive of diseases caused by exposure and inclement weather. Ganja is supposed to be a febrifuge (c), but opium is more efficacious in this respect. Bhang is good as a food accessory and also as helping digestion. It is generally taken before food. It is used by the higher and middle classes. Moderate habitual use is referred to; but in the case of bhang it is occasionally taken to relieve bowel complaints.

Ganja is bad for dysentery and bronchitis.

42. Yes; no ill-effects are observable in moderate consumers. But with *bhadro log* and other idle people there is unfortunately a tendency towards excess.

43. Quite. I have seen many ganja-smokers, but none violent or offensive.

45. None of the ill-effects are observable in the case of hard-working men, such as labourers, fishermen, etc., who form the majority of moderate consumers. They are generally honest householders and live as long, as healthy, and as moral lives as their non-smoking neighbours do.

As in the case of alcohol, the worst offenders come from those who lead idle and dissolute lives, often going to excess, and undoubtedly suffering physically, mentally, and morally. These are the men who by their excesses bring into disrepute any stimulant they may affect.

47. It is not by any means hereditary, nor does it affect the children of the moderate consumers.

48. As above.

51. I am not aware that there is any connection between crime and the use of hemp drugs.

52. Occasional excessive use of ganja may lead to sudden outbursts of passion. Habitual excessive consumers have often irritable tempers.

53. I am not aware of any such case.

54. I am not aware.

55. Hemp drugs cannot be conveniently used for causing stupefaction, and their use for such a purpose is unknown.

56. I have information of one case in which a ganja-smoker mixed dbatura with his drug for greater intoxication.

58 to 64. See my official note.

65. The duty on charas is the same as on chur ganja, viz., Rs 8 a seer; but the proportion of narcotic matter is evidently larger in charas, and the duty on it should be raised. The duty on all the three varieties of ganja has undergone considerable enhancement since the present duty on charas was fixed in 1880. The question of raising the duty on chur is under consideration. It is difficult to compare the taxation of hemp drugs with reference to alcoholic or other stimulants; but having regard to the cost of daily average allowance (3 to 6 pies) of ganja, I should say that the amount of taxation on it is capable

of increase, which can be done by gradually raising the duty.

66. Yes, taxation is based on the amount of narcotic substance present in each kind.

67. No.

68. There is no prohibition against consumption on the premises of licensed shops; but, as a matter of fact, the drugs are always bought and taken away.

69 and 70. See official note.

Oral evidence.

Question 3.—My statement in answer 5 is based on the statements of men whom I have examined, men who have had old experience in excise matters. Their evidence was unanimous that bhang grows in Purnea and Bhagalpur in the low and submerged lands. I am therefore pretty certain that this is true. As to the districts of Eastern Bengal I am not so sure. The submersion of the lands lasts from four to six weeks, I should say; and the seed remains to reproduce the plant. It may be that the plants are not found on the very lowest land. Of course annual submersion is not necessary, for the plants are found in Champaran and elsewhere, where the land is low and moist, though not submerged. As to the seeds retaining vitality when thus submerged, I can say nothing. I have not enough of botanical knowledge. I am also uncertain as to the duration of the submersion. But my information was that it was on submerged lands that the plant is generally found. It is found also more on the north of the river in Monghyr and Bhagalpur. It is there that the land is lowest. It is in the cold weather that the plant grows generally. It is cut, I believe, in Bhagalpur and Purnea in May and June, or even later. I have not myself been to those parts; nor have I seen the plant growing, except stray plants here and there. My information was obtained from people engaged in the business, and from the Deputy Collectors who look after this matter in these districts. I do not think the plants are ever collected in January or so early in the year. It is not so in Behar; nor, I think, in Bengal.

The supply of the market comes from Monghyr, Purnea and Bhagalpur only. The bhang is of superior quality in these districts; and it is therefore used. The supply is practically unlimited, quite large enough to supply any possible demand.

I have never heard of the collection of bhang seeds. I believe that bhang is an annual; but I think I have known plants live for more than one year. I am not certain.

Question 32.—I cannot give any reason for the development of Trinath Puja accompanied with ganja-smoking. It is due to a belief in the efficacy of this worship for warding off illness. It is a thing which has developed within the memory of living men. I cannot give definite information regarding its origin. I believe it was first started by a man in the Dacca district. I shall endeavour to ascertain what its origin was.

Question 62.—I think that the chief objection to the prohibition of the growth of bhang in cultivated lands is that it leads to so much harassment of the people, and it would require so large an establishment. As regards the unoccupied land (i.e., the untenanted land) it would be in my opinion hopeless. I do not think it would be very

difficult to stop its growth in the absolutely occupied lands. But I am not sure how far that would avail to stop illicit practices. I am told that cultivators and planters would be glad to get rid of the weed as troublesome. But how far the extermination there would be of much value for excise purposes, I am not sure. In Bengal, too, the stuff is used largely as a medicine for cattle and human beings, and I do not know how far it would be wise to stop the use. Even if we brought the bhang under the same regulation as ganja, I do not think we should get much revenue from it in Lower Bengal. I am not aware of any bhang being prepared from the cultivated plant in Rajshahi district. It is never brought into the golas; and I know nothing of its being made for private use.

In Lower Bengal bhang is not much used as a stimulant or intoxicant. In Behar it is a very favourite drink. The consumption of bhang in Calcutta in 1892-93 was 460 maunds. There is there a large up-country population. The statistics will show that in Lower Bengal the consumption is not great. Of course in Calcutta there is control, and the bhang is not grown in the neighbourhood. So that consumption is more accurately known there. But the presence of the up-country population in Calcutta vitiates any deduction as to Bengal generally from the figures for that city. I remember myself as a boy partaking in the use of bhang at festivals such as the Durga Puja; but (as said in my answer No. 24) this habit is going out. I have said in paragraph 60 of my memorandum that the consumption of bhang is general. That is, however, more in Behar and also occasionally and not habitually. It is true (as there said) that what has paid duty is only a small fraction of what is used. I think an attempt at control might be made by prohibiting growth in occupied land, *i.e.*, by making occupiers responsible for the presence of the plant on their lands. I would do this experimentally. If this succeeded, however, there would be this loss that the people would be deprived of it altogether in some places where there are not unoccupied lands for the plant to grow on and not a sufficient demand to lead to a shop being established. Of course, I should like to see the Calcutta system of having the stuff taxed extended, if it were feasible.

Question 65.—In paragraph 64 of my memorandum I have shown that *prima facie* it would be best in my judgment to reduce all ganja to chur. I think that the main objection at present is that the people sometimes seem to prefer the stuff with the stick. Perhaps the flat ganja is preserved better on the stick; but I doubt this. Chur is becoming very popular. I see no objection myself to having one tax fixed for all, *i.e.*, to taking what is regarded as a proper tax on chur and making people pay the same for flat or round ganja if they prefer it.

I have often had to destroy ganja in warehouses. I cannot, without looking at statistics, tell of which kind most had to be destroyed.

Question 59.—But for the probability of Government being attacked, as indicated in paragraph 63 of my memorandum, I should certainly recommend the adoption for ganja of the monopoly system at present in force for opium. I do not see the possibility of working a public gola system without such a monopoly. The difficulties in the way of having a central godown without Government monopoly are (1) the turning of the ganja every now and again; this would be a great diffi-

culty in letting the cultivators have access to it; and (2) having separate parcels.

If this were got over by the cultivators having to part with the stuff to purchasers at an early date, it would place the cultivators at the mercy of purchasers, and make the cultivation unpopular. If such sales take place, as a fact, early in Rajshahi, at present, this objection loses much of its force. But even if the other system could be worked without Government monopoly, I prefer the monopoly. All risk would be compensated by the profits. I do not consider the present system at all satisfactory in respect to want of control over storage and manufacture; therefore I recommend the monopoly system or (failing that) the public gola system. There is another great objection to the present system, that the price of supply to retail vendors varies so much. In some districts, owing to the action of wholesale vendors, the prices vary immensely in neighbouring districts. Thus in Rangpur the wholesale vendors charge the retail vendors Rs. 2-8. In the adjoining district of Dinajpur it is Re. 1 or even less. This is not because Dinajpur is a producing district, because similarly in the sudder sub-division of Balasore it is Rs. 3 to Rs. 4. In the Bhadrak sub-division, which is further off, it is only Rs. 2. This is due to monopoly and our want of control. I could give other instances of this. The Bhadrak sub-division is not more exposed to smuggling than the other sub-division. The Bhadrak sub-division is south of the sudder. As a rule, the price paid by retail vendors at head-quarters is, I find, less than in the interior; because, as a rule, there is more competition among goladars. Some wholesale vendors also reap undue profits. The Balasore man reaps a profit of about Rs. 2 a seer, which is more than two hundred per cent.

I think the Central Provinces system is a good one to meet both these difficulties; that is, to fix the price of supply to retail vendors. I do not see how the evils of monopoly can be met otherwise. Of course, the Central Provinces system would reduce the number of wholesale vendors. This would not be an evil. The system is really one of auctioning the right of wholesale vend over certain areas.

In my table appended to my memorandum, column 41 does not include brokers' fees, which are paid in court-fee stamps. There are no storage fees in our system at present, as there is no Government store. Nor does column 41 include "import pass fees" and "Gola rent," which are shown under "Excise—Miscellaneous."

Column 42 shows the amount of ganja on which duty is realised. It therefore includes the ganja sent to the North-Western Provinces and Nepal (470 maunds in 1892-93). It does not include what is sent to Assam, for duty on it is not realised here. It does include that sent to Kuch Behar, for which there is, I understand, no special arrangement. Therefore columns 32, 37 and 42 include figures relating to consumption in the North-Western Provinces, Nepal and Kuch Behar.

The column about wholesale vendors is blank; because there is no payment made by them, except the fee on passes and (in certain cases) gola rent. They receive licenses without fee on application to the Collector. In some districts the number of goladars is more than is required. In some there are fewer than is required; and we have to break up monopolies. The subject receives departmental attention from this point of view.

Appendix to Mr. Gupta's Evidence.

Statement showing the ganja exported to the North-Western Provinces, Assam, Kuch Behar, and Nepal during the 20 years, 1873-74 to 1892-93.

Year.	GANJA EXPORTED TO THE NORTH-WESTERN PROVINCES.		GANJA EXPORTED TO ASSAM.		GANJA EXPORTED TO KUCH BEHAR.		GANJA EXPORTED TO NEPAL.		REMARKS.
	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	Quantity.	Duty.	
	Md. S. Ch.	Rs.	Md. S. Ch.	Rs.	Md. S. Ch.	Rs.	Md. S. Ch.	Rs.	
1873-74	581 17 0	58,158	No duty is levied here on ganja exported to Assam and Kuch Behar. The information as regards the duty on the quantity exported to Nepal is not available from the Administration Reports.
1874-75	632 15 2	63,246	...	...	...	...	...	...
1875-76	633 6 12	63,375	...	...	...	...	...	...
1876-77	743 26 8	74,380	...	...	...	...	...	...
1877-78	864 22 2	88,308	697 10 13	...	...	...	...	...
1878-79	356 25 4	51,603	211 32 12	...	...	...	...	...
1879-80	264 18 13	37,767	700 6 0	...	...	...	...	...
1880-81	261 33 0	37,434	686 9 15	...	...	...	...	...
1881-82	495 23 8	70,828	472 11	...	69 33 15	...	...	...
1882-83	431 38 5	99,524	530 23 4	...	80 35 5	...	...	...
1883-84	681 4 4	1,28,707	854 31 8	...	9 24	* Includes quantities exported to Nepal (not separately shown).
1884-85	681 19 9	1,30,910	617 23 2	...	71 12 2	...	...	...
1885-86	812 23 13	1,34,508	567 29 15	...	66 0 11	...	...	...
1886-87	849 19 8	1,58,519	687 11	...	68 12 14	...	72 25 0	...	
1887-88	871 0 12*	1,64,917	722 30 15	...	79 17 6	...	...	...
1888-89	890 28 8	1,69,922	690 2 12	...	91 5	...	107 4 0	...	
1889-90	737 27 8	1,37,741	739 21 8	...	84 35	...	126 13 4	...	
1890-91	667 33 10	1,27,065	759 33 13	...	75 39 8	...	120 13 12	...	
1891-92	467 10 2	96,497	796 4 3	...	88 21 13	...	228 2 4	...	
1892-93	563 2 0	1,22,687	681 0 0	...	89 0 0	...	177 17 0	...	

18. Evidence of MR. L. HARE, Magistrate and Collector of Muzaffarpur.

1. As District Officer I have opportunities of obtaining information regarding the subject-matter at hand.

These answers have been prepared by the Excise Deputy Collector. I believe them to be correct.

2. Yes, the definitions seem to be correct. These articles are locally known by the names of bhang, charas, and ganja.

3. Only the hemp plant known as bhang grows spontaneously in all districts of Bengal. The rest do not grow spontaneously.

4. It is known by the following names: ganja, siddhi, bhang, and charas. Charas and ganja refer to the same plant. The bhang plant is different.

5. Not known.

6. Dense.

7. (a) No.

(b) No.

(c) No.

(d) No.

8. No.

9. Not known.

10. No special class.

11. As far as is known, no.

12. The excise officers frequently come across plants which have to all appearance been cultivated, though this is always denied.

13. Excepting wild bhang, which grows spontaneously, no other hemp plant is cultivated here.

14. (a) No.

(b) No.

(c) Neither ganja nor charas is prepared in this district. Ganja and charas are used for purposes of smoking only. They are never drunk.

The ganja leaves extracted from the twig are crushed and mixed with tobacco leaves. These are then put into a pipe and smoked. Sometimes these leaves are eaten just like tobacco leaves. Powdered bhang is sometimes eaten by the sanyasis. It is generally drunk mixed with the follow-

ing spices:—Black pepper, sugar, rose leaf, aniseed, cardamom, and milk or curd.

15. Not known.

16. (a) Yes.

b) Yes.

(c) No.

17. No special class.

18. All these drugs deteriorate by keeping, and lose their effect after about two years. After two years a sort of worm appears, which eats up the intoxicating matter of the ganja. Ganja, if used after two years, will produce headache and will not act as stimulant. No special measure known can prevent deterioration.

19. Yes.

20. The low class men, such as labourers, cultivators and fakirs, generally use ganja. They are occasionally consumed by the middle class. A small portion of Muhammadans also use these drugs. Women do not use these drugs. The consumption of charas is very small in this district. We have opened only one charas shop this year experimentally. As regards ganja it may be said that about $\frac{1}{8}$ th of the population use the drug.

21. Chur and flat are generally preferred to round ganja, as the latter produces less intoxication.

22. Charas is imported from Amritsar to Gorkhampur, whence it is brought into this district.

23. As far as is known, no. The consumption is not restricted to any locality.

24. (a) The fakirs eat powdered bhang.

(b) Middle and higher class men drink bhang mixed with cardamon, aniseed, and other spices.

25. The consumption continues to be the same as before.

26. (a) 80 per cent.

(b) 5 "

(c) $7\frac{1}{2}$ "

(d) $7\frac{1}{2}$ "

27. Among the low class, the cultivators and labourers generally use these drugs as stimulants. Fakirs use them to help them in meditation and to preserve their health against the evil effects of damp, open-air living, and exposure. High class people use it as preventive against the evil effects of cold, damp, etc.

28. (a) $\frac{1}{8}$ of a tola, at a cost of $\frac{1}{2}$ anna.

(b) 1 tola, at 4 annas per diem.

29. (a) Ganja and charas are generally consumed along with tobacco leaf. Charas is also consumed mixed with prepared tobacco.

(b) Sometimes rose leaf and other spices are mixed to add flavour to the smoke.

The Sadhus, in exceptional cases, mix dhatura seed with bhang to make it more intoxicating. Generally bhang is consumed with the admixture of sugar, black pepper, rose leaf, aniseed, cardamoms, and sometimes milk or curd. The object is to make the drink more tasteful and palatable.

There is no special preparation such as bhang massala in the district. The following spices and articles, however, form the chief ingredients in bhang massala: mirch (black pepper), sonf (aniseed), kasni, seed of cucumber, almond, saffron, rose leaf.

30. Ganja and charas are sometimes indulged in singly and sometimes in company. Bhang is generally used in company.

It is mainly confined to the male sex in youth and old age.

It is not usual for children to consume any of these drugs. On rare occasions females use bhang. In some eastern districts females use ganja.

31. (a) Bhang, no.

Charas and ganja, yes.

(b) It is very easy giving up the use of bhang, but very difficult in the latter two cases.

(c) So far as charas and ganja are concerned, yes.

32. There is no special custom, so far as charas and ganja are concerned. But it is a fact that on the Holi and other festive occasions these two drugs are consumed to a large extent.

As regards bhang, it is customary to use it on the Holi festival day, which takes place in the month of Phalgun, when friends and relations are invited to partake of bhang. In eastern districts it is customary, nay, considered religious, to drink bhang on the day following the last day of Durga Puja. This custom prevails among the Hindus only.

Yes, on the Holi day. The consumption on these occasions is generally excessive. It is not likely to lead to the formation of any habit.

33. People do not look down upon bhang consumers with contempt. The consumption of ganja and charas is looked on with disrepute; the reason is that people do not approve of any sort of intoxicating thing. Hemp plant is not worshipped here.

34. Yes. As already remarked, it is very difficult to break off the habit of using ganja and charas, and so, when people are generally addicted to these drugs, they will think it a serious privation if they do not get these drugs.

Moreover, the drugs act as stimulants, and enable poor people to work hard in the field, and so they won't like to part with these drugs, which are also said to be efficacious in a cold and damp climate and wet weather. About 30,000 people consume ganja in this district, 25,000 (labourers, etc.), 500 (high class men) 4,000 (fakirs), and 500 (some low class men).

35. I don't think that it will be at all feasible to prohibit the use of any of these drugs. The use of these has become such a part and parcel of the lives of many that at the appointed time of the day they must have these drugs or they will be unfit for any work. I fear that any attempt to prohibit the use will lead to illicit consumption. The prohibition is likely to produce serious discontent. No special political danger is apprehended. But it is most difficult to estimate what will constitute political danger. By itself this would probably not be grave in this district; but the fakirs are listened to and respected by the common people. It would undoubtedly be a thorn in the side of a somewhat reckless class. The prohibition is not likely to be followed by any appreciative increase in the consumption of liquor for the following reasons:—Ganja consumers generally do not drink liquor. Moreover, the expense of buying liquor is too much for the poor people that consume ganja. It will really be a hardship to the labourers, etc., to be deprived of these drugs. There are certain caste prejudices also among the Brahmins and

Rajputs that stand in their way of taking liquor.

36. No. In Dacca I had reason to believe that the excessive raising of the price of liquor was driving drinkers to use ganja. The reverse action might take place if ganja were made sufficiently dear or were wholly unobtainable. But ganja, etc., would be certainly imported from Nepal long before this stage was reached, and it would be quite impossible to stop this with an open frontier such as we have.

37. The effect is the same; only that charas is more intoxicant than ganja.

38. Chur and flat ganja are more intoxicant than round. There is no difference of effects in kind.

39. Ganja and charas are never eaten or drunk. Powdered bhang is sometimes eaten. Generally it is drunk. Eating in this case is more injurious than drinking. Drinking is more refreshing, and destroys the natural heat of the plant.

40. In the cure of itches, sometimes, ganja is used mixed with oil. It is also used as preventive of damp. Rheumatic patients and persons suffering from ague are sometimes advised to smoke ganja. Only bhang is used in cattle disease.

41. (a) Yes, when used moderately.

(b) Yes.

(c) Yes.

(d) Not known.

To those who are unaccustomed to it moderate occasional use of the drug is beneficial. To those accustomed moderate habitual use will also secure the desired end.

Generally the cultivators and labourers use the drugs for the purpose noted above.

42. Many persons find the moderate use not only harmless but beneficial. Experience has proved so.

43. Yes.

44. It is refreshing, produces slight intoxication, does not allay hunger, creates appetite. The effect of the consumption of one chillum of ganja and charas ($\frac{1}{8}$ of a tola) will last for an hour only. That of bhang lasts for four or five hours.

There are after-effects in the case of bhang. In the case of ganja and charas, as soon as the intoxication is over, people feel a little uneasiness.

45. (a) No.

(b) No.

(c) No.

(d) No.

(e) No.

(f) No. No such case known. I believe insanity has only been connected with habitual immoderate use.

46. The sanyasis, as a rule, habitually use the drug in large quantities. They are not said to have suffered in the least by the use of these drugs. On the other hand, their longevity is partially attributed to their habitual use of ganja, which enables them to sustain themselves in the midst of damp and cold climates.

I have no personal knowledge of any cases, but there are in the lunatic asylums many who are said to be there on account of immoderate use of ganja.

47 and 48. I do not think anything of the kind has been authenticated.

49. (a) Not known.

(b) Not here.

(c) Not known.

(d) Not directly. It is excessive debauchery which produces impotence. If used as suggested, the latter would certainly be present.

50. Not known.

51. (a) Not known.

(b) No connection has been traced here.

52. No connection.

53. In lunatic asylum visiting, I have come across cases so attributed.

54. No experience of this.

55. (a) Sometimes they do so by mixing dhatura seed with bhang.

(b) No.

56. Dhatura is not mixed for personal consumption. When mischief is intended, dhatura is mixed for others. A few sanyasis, however, use dhatura as admixture for personal consumption.

57. No such case known. My general experience is that ganja consumption has more markedly bad effects in Eastern Bengal than in Behar, that is to say, more cases of bad effects came to my notice in Dacca than in Muzaffarpur. I believe in Eastern Bengal the Muhammadans are large consumers.

58. Yes.

59. The system in force is working well and does not seem to be capable of any considerable improvement. I would like to see a maximum and minimum price fixed for the retail sale of the drug, as I think violent fluctuations such as sometimes occur are mischievous both to revenue and to consumers. It is this. The trade is naturally worked for profit. A ring of one or two or a few dealers is formed which outbids all the small men. If there is difficulty in this, they buy a few shops and sell very cheaply, so as to take away the custom of the small men and reduce their profit by this means, and because they, too, must sell cheap to get any custom at all. Then having got them all out, the retail price is run up and large profits secured. When the small men cease to compete, the big men reduce their bids and the revenue is at once reduced enormously, and it takes a long time to get back the small men to come and compete. By fixing a yearly maximum and minimum you, to a great extent, prevent this intershop-competition and each shop is sold on its special average merits.

60. Ganja is not produced in this district. It is grown at Rajshahi, where it is sufficiently well controlled by Government officers specially employed for the purpose.

61. It is not produced here.

62. Attempts were made from time to time to extirpate the growth of wild bhang; but, far from securing the desired end, it proved a source of trouble and oppression upon the people on whose holdings the wild plant grew in profusion. The scheme has since been given up, as it was found almost impossible to check the growth of this wild plant.

63. No.

64. No.

65. Yes.

66. Different rates of taxation prevail with regard to the three different kinds of ganja (flat, round, and chur), and rightly too. For in chur nothing is lost, in flat one-fourth, and in round one-eighth are to be deducted for twigs, etc.

68. Yes. These shops are necessary, as they supply people with the drugs which they require. People generally carry away their ganja, but sometimes smoke at the shop.

69. Yes. When any new shop is opened, the opinion of the municipality as well as of the people inhabiting the locality is consulted.

Yes, local public opinion should be consulted,

as is the case at present, before opening any shop in the locality; but a ganja shop is not objectionable to the general public, as liquor shops may be, if it is unsuitably located.

70. No such case. It is almost impossible to detect the smuggling of ganja in small quantities. I believe that any attempt to stamp out ganja smoking or an undue raising of the tax would lead to extensive smuggling, which we should be utterly helpless to prevent.

Again, it would induce recourse to other similar drugs. In Eastern Bengal a decoction is made of the leaves of the jute plant.

19. Evidence of MR. G. E. MANISTY, Magistrate and Collector of Saran.

1. Information has been obtained from officials connected with the Excise Administration for a long time, medical men, as well as from many non-officials of the district.

2. These definitions can be accepted for this district. Each of these drugs is locally known by the name given in this question.

3. The hemp plant grows spontaneously in the districts of Darbhanga, Champaran, Muzaffarpur, and Saran. It is abundant in Darbhanga, Champaran, Monghyr, and Bhagalpur.

4. It is known by the different names of siddhi, sabuzi, and bhang. All these three names refer to the same plant.

5. Sterile land, moist climate, damp soil, and low ground are conditions favourable to the growth of the wild bhang.

6. The growth of the plant is ordinarily scattered.

12. No reason to think so.

14. Bhang only is prepared in this district from wild hemp (*vide* Question 3). It is not confined to any particular tract, nor is it prepared to a considerable extent; only rarely people have recourse to it.

15. The plants (wild bhang) when mature are cut down and dried in the sun. The leaves are then separated from the branches and prepared for smoking, eating, or drinking as detailed below:—

(a) *Smoking*—Dry leaf of bhang is used for smoking purposes, like ganja, by poor peasants and fakirs of some places where ganja is not within the reach of the consumers. The cases are few.

(b) *Eating*—Dry leaves of bhang are ground with black pepper and swallowed in the form of pills.

(c) *Drinking*—The above preparation in (b) is diluted with water and drunk.

16. Bhang is generally prepared by the people in their houses. It can be prepared from the hemp plant wherever it grows.

17. The above preparations of bhang are generally made by the people, who form the consum-

ers and the peasantry, consisting of almost all classes of Hindus.

18. *Ganja*.—It does deteriorate. It entirely loses its effect in time. It keeps good with ordinary care for about two years. When it is old and kept for some time, it loses its effect. Damp climate and want of ventilation make it lose its effect rapidly. When placed above the surface of the ground or in tin-lined boxes and in ventilated places, rapid deterioration can be averted.

Bhang.—It does not deteriorate for about two years. It begins to lose its effect after two years. It keeps good with ordinary care for about three years. The causes of deterioration are the same as of ganja. To prevent deterioration the same special measure may be taken as for ganja.

Charas.—It is never used in this district.

19. Ganja is used for smoking purposes only in this district. Charas is not used in the district.

20. The Hindu mendicants known as Jogis and Sadhus invariably, and almost all the different classes of Hindus more or less smoke ganja. The proportion of Hindus who smoke ganja to those who do not is 1 to 20. Ganja smoking is not confined to any particular locality. No Muhammadans, except some low class of them, specially professional singers and other low characters, are given to it.

21. The smokers are indifferent to the kind of ganja, but chur is extensively sold, probably because it has no twigs. Flat and round ganjas are also broken into chur for retail sale.

22. No charas is in use in this district.

23. *Vide* answer to Question 15 (A).

24. Hindus of all classes eat or drink bhang. No proportion can be given. One and the same man eats as well as drinks bhang, but the season for each is different. In hot and rainy seasons the drug is drunk, and in the winter it is eaten. It is not confined to any particular locality.

25. The use of bhang and ganja both is on the decrease. The reason in our opinion is that formerly both the drugs were cheaper, and consequently even persons of very small income could afford to have them in larger quantity at a less cost, while under the present circumstances they cannot do so. Better administration of the Excise Department in respect of bringing to justice persons having in their possession a large quantity of bhang or having in their fields wild-grown

plants may also cause the decrease in the use of this drug.

- | | | |
|----------------------|---|--------|
| 26. (a) 40 per cent. | } | Ganja. |
| (b) 20 " | | |
| (c) 25 " | | |
| (d) 15 " | | |
| (a) 50 " | } | Bhang. |
| (b) 10 " | | |
| (c) 25 " | | |
| (d) 15 " | | |

27. Hindus of all classes, Brahmins, Rajputs, and Bhūinbars and mendicants, as a rule, form the consumers of ganja and bhang. Of these the rich and well-to-do class use these drugs for pleasures' sake; the labouring class to alleviate fatigue; and the mendicants to concentrate their thoughts. Bhang also is sometimes used for medicinal purposes.

- | | | |
|----------------------------|---|--------|
| 28. (a) Half anna per diem | } | Ganja. |
| (b) Four annas " | | |
| (a) Three pies " | } | Bhang. |
| (b) Six " " | | |

29. (a) Ordinarily tobacco leaf is mixed with ganja; (b) rose water and flower are also used with it for flavour. Dhatura is not used with ganja. Tobacco is used with ganja to make it suit the taste, and also to weaken its effect.

Bhang. (a) Black paper is ordinarily used with bhang; (b) bhang massala, sugar, and milk. Dhatura is not used with it.

Bhang massala. We know of the preparation called "bhang massala." Its ingredients are aniseed, kasni, rose flower, and seed of cucumber and melon. The object of the admixture is to have a cooling effect and agreeable taste.

30. *Bhang.* The extent of its consumption is the same in solitude as in company. it is confined to the male sex. Children do not use it.

Ganja. In company ganja is consumed considerably more than in solitude. Yes; it is mainly confined to the male sex above the age of 15.

31. The habit of consuming ganja and bhang is easily formed, and it is difficult to break it when formed. There is a tendency in the case of each of these two drugs, like alcoholic drink, for the moderate habit to develop into excess.

32. With the Hindus it is a social custom in Holi to consume ganja and bhang as well as other intoxicants. It is not essential. It is not likely to lead to the formation of the habit. In the Holi time the excessive use of the drugs sometimes proves injurious.

33. The public generally look down upon the consumers of the drugs. There is not any live public opinion, social or religious, in regard to the practice. The use of this narcotic in any form is in disrepute; the sentiment is attributable to the fact that the moderate habit frequently develops into the excessive, which ultimately leads the consumers to ruin. There is no custom of worshipping the hemp plants.

34. In the case of ganja it would be a serious privation to habitual consumers to give it up. The reason simply is this, that they have contracted the habit, the discontinuance of which, it is said, would tell heavily upon their constitution. The same may be said in the case of bhang. Probable number of such sufferers would be thus:—

For ganja, 20 per cent.
For bhang, 5 " "

35. It would not be feasible to absolutely prohibit the use of ganja and bhang. If it is done, it would be consumed illicitly to a great extent. The prohibition can only be enforced by stopping the cultivation and wild growth of these drugs in the districts where they grow, but the prohibition of the wild growth of bhang is not very easy in this district, as it grows spontaneously in unfrequented places. The prohibition, if effected, would cause discontent to a large extent amongst the habitual consumers, especially the Sadhu class. Perhaps there is not any serious political danger. About this point Mr. Tytler, Sub-Deputy Opium Agent at Siwan, was consulted, whose opinion must be considered very valuable from his long residence in this district (about 20 years) and from the special opportunities he has had to know about the tendencies of the people. He is decidedly of opinion that an absolute prohibition of the use of the drugs would be attended with political danger. His argument is that the Sadhus and Brahmins and Rajputs holding some position in society chiefly form the consumers of the drugs. They will be greatly discontented when deprived of the use of the drugs, and naturally all the other classes of the Hindus with whom these consuming classes wield considerable influence will sympathise with them. There is no doubt that the habitual consumers when deprived of the use of these drugs will raise a yell of discontent which may occasion disturbances. The prohibition may be followed by recourse to an inappreciable extent to (a) alcoholic stimulants, because the upper class of Hindus and the mendicants (Sadhus) who are given to the use of these drugs would not have recourse to alcoholic stimulants, as they do not harmonise with their sentiments.

(b) No other drugs can replace ganja and bhang.

36. We have no reason to think so. The two drugs are cheaper than the weakest country liquor supplied to consumers. A pie worth of ganja would be more effective than one anna worth liquor.

37. The effects are almost the same, but that produced by charas is somewhat greater.

38. No.

39. The smoking of any preparation of hemp plant is less injurious than drinking or eating the same. In smoking, the ingredients of ganja are made volatile and remain within the system for a short period, and then eliminate easily through the respiratory tract, and hence have less effect. As regards bhang-smoking, which is rarely used, the effect is considerably less than that produced in the form of drinking or by taking it in the shape of boluses.

40. Bhang and ganja are used by native doctors for medicinal purposes in chronic intermittent fevers.

Bhang is used in the treatment of cattle disease.

41. Moderate use of bhang (a) is beneficial as a digestive; (b) and acts as a stimulant after fatigue; (c) and both of them (bhang and ganja) are considered as a febrifuge or preventive to malaria; (d) and moderate doses of both of them stimulate virile power.

Hindus of all classes, specially the upper ones, as Rajputs, Brahmins, etc., are addicted to ganja and bhang in the proportion of five in every thousand. This refers to the moderate habitual use of the drugs.

42. The moderate use of these drugs may be considered as harmless, as they are digestive and preventive to malaria, and curative to looseness of bowels and dyspepsia.

43. Yes.

44. Immediate effect of the moderate use of the bhang and ganja is stimulant. It is refreshing, and produces slight intoxication and increases appetite. It does not always allay hunger. The effect of ganja is transitory and bhang is somewhat lasting. The after-effects are depression and loss of bodily health and flesh, and they are generally noticed when good food is not used by the consumers.

If the use be discontinued, it produces craving or uneasiness.

45 and 46. Moderate use of these drugs acts upon the physical health when proper food is not taken. Ultimately the moderate use of these drugs brings on loss of mental power, but generally moral power remains intact and as a rule not corrupted. In the long run it causes dysentery and sometimes bronchitis, leading to asthma or consumption. It does not produce laziness nor impair the habits of morality or induce debauchery as a rule.

Moderate use does not produce as a rule insanity or deaden the intellect. But bhang somewhat deadens the intellect and produces laziness.

Moderate use occasionally produces insanity in men of sanguineous temperament.

The insanity, when produced, is acute mania, and generally of temporary character when the habit is given up. It may relapse if the habit be resumed. The insanity is of a violent character, and the victim is apt to attack others or commit suicide by injuring himself. Men confess to the use of the ganja which has led to their insanity. No cases have come to my notice in which a person of weak intellect or suffering from some brain disease was addicted to ganja, and subsequently fell a victim to insanity.

The excessive use has a very bad effect on the constitution, which it impairs. It produces loss of appetite, brings on dysentery, bronchitis leading to consumption and asthma, and impairs the moral sense, produces laziness and immorality, but not debauchery, and as a rule produces loss of sexual appetite and brings on insanity of a violent character.

47. No hereditary tendency.

48. Ditto ditto.

49. It is used in moderate doses as an aphrodisiac, and sometimes so used by prostitutes.

When used as an aphrodisiac, it is not more injurious than when taken as a narcotic. Moderate use ultimately leads to impotence sometimes.

50. When used in excess it produces loss of sexual appetite, and is very injurious.

51. Generally bad characters of low class people are addicted to it. Moderate use does not produce any crime.

52. But when used in excess it leads men to commit crime.

53. Excessive indulgence of ganja or bhang may incite to unpremeditated crime, violent or otherwise. I am not aware of any case in which it has led to temporary homicidal tendency.

54. I have no personal knowledge of such cases, but it is not impossible, but rather probable, that criminals may fortify themselves by using the drugs before they commit a premeditated act of violence or other crime.

55. Generally it is not used by criminals to stupify their victims, so as to commit violence upon them.

56. Ganja smoked with tobacco leaf has less effect than when taken alone, in which form it is rarely used. Alcohol and opium enhance the intoxicating effect of ganja and bhang.

Bhang mixed with sugar produces much more lasting effect than taken alone. Both are used with tobacco to increase the intoxicating effect.

57. I have no experience as to ganja or charas being eaten or drunk.

58 and 59. I think the Excise Administration in respect of hemp drugs has been working fairly well. The recent increase of duty on ganja has to a certain extent reduced the consumption of the drug in this district.

60. Ganja is not produced in the Saran district.

61. No charas is produced here.

62. Bhang is not cultivated in this district. The wild plant grows spontaneously in out-of-the-way and unfrequented places. These can be controlled through the chowkidars if desired.

63. No.

64. No.

65. It is practically reasonable.

66. Yes, according as more or less of twigs and branches contained in each.

67. No objection.

68. Generally not consumed at the shops.

69. Yes. In towns the Municipal Commissioners, and in mufassal public bodies are consulted through Excise Officers.

70. No. Generally consumed duty-free by all classes of people.

20. Evidence of MR. J. KENNEDY, Magistrate and Collector of Murshidabad.

1. I have served for close on 20 years in districts in which ganja is used.

2. Yes.

3. It grows sparsely in this district. It also grows wild on the hills in the Cachar District, and if I remember right Sylhet.

4. I only know it as ganja.

5. It requires a damp climate. I don't know any more of its necessities.

6. Dense.

7. Yes, but I know nothing about it. I have never been in a district where it was cultivated.

12. I know of no such cases.

13. It is restricted to Rajshahi District I believe, but I know nothing about it.

14. Yes, but I can give no details of my own knowledge.

18. Ganja deteriorates if kept over a year and loses its strength. The same rule applies to charas and siddhi.

19. I believe they are used only for smoking.

20. The lower labouring classes, especially fishermen and boatmen, use ganja. When a man of a better class uses ganja, it is generally because he can't afford spirits. Occasionally well-to-do people smoke charas mixed with tobacco.

21. Chur seems the favourite.

22. Charas imported from Amritsar is generally used here.

23. Bhang is never smoked, but always mixed with water and sugar or milk. Up-country people are the main consumers. It is also made into a sweetmeat and this is consumed both by Bengalis and up-country people. The name of this sweetmeat is majun.

25. Among the middle classes, charas is preferred to ganja because any one smoking ganja is supposed to be very poor. A well-to-do man who smokes ganja is liable to be jeered at.

26. They are mostly moderate consumers. The only class among whom I often met excessive consumers was among the coolies on the Cachar tea gardens, and there I did meet several cases of insanity produced by excessive ganja smoking. I have very rarely heard of excessive smokers in this district, and I have not found a single ganja or charas smoker in this district who has gone mad. There may be one or two in the Lunatic Asylum, but the Superintendent can best answer about them.

27. Poverty seems the main reason for people using ganja.

28. Moderate consumer—

One two-anna weight of ganja costing three pice.

One two-anna weight of charas costing two pice.

One twelve-anna weight of bhang costing three pice.

Excessive consumers double the quantity.

29. (a) Dried tobacco to get more of a smoke.

(b) Dhatura seeds to make it more intoxicating and lasting.

Bhang massala is compound of bhang, black pepper, aniseed, cucumber seeds, milk, sugar, dried rose leaves. Bhang drinkers generally use it.

30. Consumed more in solitude than in company. Mainly confined to the male sex. Children rarely take it.

31. It takes some time to form the habit, but once formed, it is difficult to break it off.

32. A drink of bhang is offered to guests on last day of Durga puja, and ganja and bhang are offered on night of Sivratra to the God Mahadev and the priests and devotees consume it. It is essential as a religious act. It is not likely to lead to formation of a habit, being only offered once a year and therefore can't be said to be injurious.

33. The use of these drugs is supposed to be rather low because it is mainly confined to the poorer classes.

I know of no custom of worshipping the hemp plant.

34. A very serious privation to the labouring classes, especially fishermen and boatmen, as ganja is their only stimulant. A rough guess would put

the labouring men who use ganja at over two thousand in this district.

35. It would be a physical impossibility to prohibit the use of the drug. There would be no political danger actually incurred by the prohibition in this district as the very poor only use ganja, but there would be very keen discontent and probably strikes and riots. Of course the prohibition would lead to concealed cultivation of hemp and the use of any other drugs that could be obtained.

36. Alcohol can't be substituted for these drugs unless it is made very cheap indeed. The present tendency is to make it dearer.

37. Ganja takes effect instantaneously while charas is slow in its effect. Ganja seems to affect the mental faculties mainly, and charas the physical.

38. All the same effect.

39. Smoking is certainly the least injurious way of taking any preparation of the hemp plant.

40. Bhang is prescribed for indigestion and heat apoplexy among cattle.

41. (a) Yes.

(b) Yes.

(c) Yes.

As a preventive from sunstroke in a hot day. Well-to-do people use it as an accessory to food. Boatmen and fishermen and palki-bearers use it for its staying-power. Many use it occasionally as a febrifuge.

42. I consider the moderate use harmless, as out of the great number of ganja smokers I have known, I suppose in all my life I have only seen some twenty men injured by it, a much lower number than those I have seen injured by alcohol.

43. Yes.

44. Habitual moderate consumers. It is refreshing. It does not intoxicate. It allays hunger. It does not create hunger. The effects last for about two hours. No after-effects. Want of subsequent gratification produces uneasiness. Moderate smokers in old age are liable to indigestion.

45. It causes indigestion and the consumer is especially liable to dysentery.

After the effect of a smoke has worn off, lethargy is apt to ensue.

Moderate use of the drug seems to have no other effects.

Among the Cachar tea garden coolies I believe insanity is produced by the immoderate use of ganja, but these men also use other stimulants.

46. Immoderate use affects the digestion and appetite, causes great lethargy and weakens the frame generally. But it is to be noted that the fakirs and religious persons who are the principal excessive consumers here habitually use dhatura as an adjunct to ganja, and I am not prepared to discriminate between the effects of the two drugs.

47. No.

48. I am unable to answer this question precisely.

49. I know nothing of this.

51. Bad characters generally prefer alcohol, and I am unaware of any connection between ganja and crime when the drug is used in moderation.

52. It is only when excessive smoking causes insanity that the consumer is dangerous.

53. I have met with no case of this kind in this district. My Cachar experiences have now rather fallen into oblivion, but I have an impression there were one or two cases there.

54. No.

55. I have met with no such cases.

56. Moderate consumers generally mix it with tobacco and excessive consumers with dhatura.

58. The price of spirits has been raised far too high, and the recent orders forbidding the private manufacture of madak are most objectionable.

59. I would reduce the retail price of a quart of country spirits to from six to eight annas, adhering to the present central distillery system. The interests of the distillers would ensure the chief liquor being cheap. I would also allow private manufacture of madak.

63. I have no objections to present system.

64. I have no objections as they work smoothly, and I am not aware of any smuggling.

65. I would make no change in the taxation of ganja.

66. I am aware of no reasons for different rates in different localities.

67. No.

68. I have never had such shops in any district where I have been employed.

69. Local enquiries are made as to the wishes of the feelings. The present official tendency is rather to close old shops to opening new ones.

70. I know of no smuggling.

Oral evidence.

I have been over 19 years in the service. I had seven years' experience in Assam as Assistant Commissioner and Deputy Commissioner in the districts of Cachar and Sylhet. I am not prepared to give a precise opinion about ganja. In my written answers I made as precise statements as I could, based on enquiries specially made here in the Murshidabad district on purpose. I did not like to trust my memory in regard to definite details.

The effects of ganja never came prominently before me, except when I was in charge of the Cachar Jail as Assistant Commissioner. There

I saw its alleged effects in connection with tea garden coolies as producing insanity. They were lunatics sent to the jail for observation. Ganja was the principal cause assigned. I, of course, did not make special enquiries as to the cause. It was not my business to do that. I heard dhatura mentioned there. It was said that coolies and others put in dhatura and other substances to increase the effect of the dose. I have heard the same here. I did not verify this statement. It was a matter of common talk that other drugs were thus used to increase the effect, that there was admixture of intoxicants for this purpose. I heard this in connection with these insanity cases. The tea garden coolies are also noted hands for liquor. They took anything they could get. We had to take special precautions about their liquor shops. We had constant complaints.

I think that the connection of ganja with insanity was probably much exaggerated. Just as in the ordinary vital statistics the police put down every thing to fever, so they are apt to put down insanity to ganja very freely, and often without sufficient cause. So, when there is an epidemic of cholera, everything like diarrhoea or any allied form of sickness is put down to cholera. I daresay the lunatics, as a rule, did use ganja. It grows wild in Cachar, and that could be used. The excise ganja was generally used by the coolies, and because they used it, it was put down as the cause. Ganja had a bad name. My opinion is that ganja is a more deleterious drug than opium. I am not prepared to say that it is more deleterious than alcohol. I have not found that insanity is so freely attributed to alcohol as to ganja. But alcohol is much more widely used than ganja, and, in my opinion, does more harm to the people. Ganja is the poor man's intoxicant. It is cheap. It is much used by coolies, and this explains the readiness of the police to assign it as a cause of insanity. It is because you get the paupers in the asylums that so large a proportion of cases is attributed to ganja. The well-to-do lunatics do not come, as a rule, to the asylums.

The planters sometimes complain that the whole garden work is stopped at one time by liquor. Some planters accordingly take the shops themselves and keep them under their control to prevent drunkenness. This is sometimes an excellent plan. The shops cannot be closed as stimulant is required.

21. Evidence of MR. T. L. JENKINS, Magistrate and Collector of Dacca.

2. The definitions given may be accepted for this district with this modification, that the "round ganja" also includes ganja with small twigs which have no rounded shape. These pass as "round ganja" in this and several other districts.

3. In all the districts of the Rajshahi Division, in Murshidabad and Dacca the hemp plant grows spontaneously. In Manikganj sub-division of Dacca it is abundant.

4. By bhang and siddhi as distinguished from ganja. The bhang or siddhi plant and the ganja plant are easily distinguishable by their appearance. The leaves of the former are dark green and thick, while those of the latter are light green and thinner.

5. The plant grows abundantly in low, damp, and soft soil. Excessive rain injures the plants and causes their leaves to lose narcotic properties.

6. The growth of the wild hemp is ordinarily dense.

7. There is no cultivation of the hemp plant for production of ganja or charas in this district. Sometimes plants growing from the seeds of ganja purchased at the licensed shops are preserved and reared with care by some consumers, evidently with the object of obtaining ganja from them, or of using their leaves as intoxicants.

The dried leaves of wild bhang plants are sometimes stored for use as bhang or as a remedy for cattle disease. The plants are not used for their fibre or seeds.

8. The growth of wild bhang plants is being greatly restricted by the action of the excise and police officers.

9. When wild bhang plants are reared, cow-dung, oil cakes, ashes, and burnt earth are put on the soil

as manure. Milk is poured upon the plant in the belief that it causes flowering.

10. No; the persons who thus cultivate the wild bhang do not form a special class.

11. It is believed that the plants cultivated for the production of ganja are never raised from the seed of the wild hemp.

12. See answer to question 7. Such cases are not common in this district, and are not confined to any particular locality. The male plant is not extirpated in such cases, as the cultivator here cannot distinguish between male and female plants.

13. Babu Hem Chandra Kerr's report may be referred to for an answer to this question.

14. (a) Very seldom.

(b) Never.

(c) Bhang is generally prepared in this district from the wild hemp.

15. The bhang from the wild plant is usually prepared by letting the branches or leaves dry in the sun and then storing these up. A more costly method of preparation is boiling the leaves with milk and water. The leaves are afterwards dried in the sun and stored. This practice is resorted to by few only.

In rare instances the dried leaves are smoked when sometimes they are mixed with ganja. Bhang is commonly drunk. The drink is prepared by grinding the bhang leaves with bhang masala, a compound consisting of the following ingredients, and by making a dilution of the paste:—Coriander, black-pepper, salt, sugar, cucumber seed, kahu, kasni, gokkhur kanta, aniseed, poppy-seeds, rose petal, dhatura roots.

The latter is sometimes made into pills and eaten or swallowed with water. To add to its flavour, rose-water or attar, cocoanut water, or the juice of its kernel are blended with the mixture.

Ganja is smoked with tobacco leaves. Ganja is sometimes added as a remedy against coughing.

16. (a) Bhang is generally prepared by the people in their houses.

(b) Yes.

(c) No. As far as is known here.

17. By all classes of people the preparation of bhang is made. The lower classes specially use it for medicinal purposes. The higher classes use it for intoxication and benefit of health. There is an adage that siddhi increases budhi (intelligence).

18. These drugs deteriorate by keeping, and lose their effect in time. Ganja keeps for 2 years; charas for one year; and bhang one year. The cause of deterioration of ganja and charas is the drying of the resinous substance. Bhang is liable to be eaten by worms. To prevent rapid deterioration, ganja should be packed with straws and kept in gunny bags in dry warehouses.

19. Yes; though in very rare cases ganja is eaten by chewing after stripping it of leaves. Majum is prepared both from ganja or bhang, which is mixed with ghee (and sometimes milk) and sugar. The confection thus made is eaten as a sweetmeat. Charas is exclusively used for smoking.

20. About 60,000 of the total district population (2,420,394) smoke ganja. With but a very few exceptions, they are males, and belong to all classes of people. The majority of the consumers are

tradesmen, labourers, fishermen, Baishnabs, Baul, sanyasis, or recluses. The Muhammadans form a minor portion, say one-fourth of the total number of consumers.

About 10,000 people use bhang. They belong to all classes. Many take it as a medicine in bowel complaints and some as a prophylactic in cholera epidemic.

The use of charas is confined to a very limited section of the people in the town. The number of consumers is estimated to be only 100 persons.

21. Flat ganja is preferred for smoking. It is said that it possesses more narcotic properties than the other two varieties.

22. Charas is imported from Calcutta.

23. The poorest consumers who cannot afford to pay for ganja regularly, occasionally smoke bhang.

24. See answer to question 20.

25. The use of ganja is on the increase in consequence of the enhanced price of country spirit. Several drinkers who cannot afford to pay for the liquor have taken to ganja. The allowance of each consumer has, however, been decreased owing to the increased price of the drug and of food-grains. The consumption of charas has been almost stationary, and that of bhang has decreased in consequence of the action taken in destroying the wild bhang plants.

26.

	Ganja. Per cent.	Charas. Per cent.	Bhang. Per cent.
(a)	70	80	50
(b)	10	5	5
(c)	15	10	45
(d)	5	5	5

so far as this district is concerned.

27. The habitual moderate consumers of ganja are the tradesmen, labourers, cultivators, fishermen, and the higher classes (*bhadra lokes*). Byragis, Bauls, sanyasis are usually habitual excessive consumers. Occasional moderate and excessive consumers are taken from those classes. At festive gatherings, such as those at Trinath mela, persons take ganja in moderate quantity. The habitual excessive consumers of bhang are generally up-countrymen. On the occasion of festivals, such as Daserah, Goraknath Puja, Madan Chaturdasi, bhang is consumed in moderate and excessive quantities among the Hindu communities.

The labouring classes generally resort to the smoking of ganja as a sedative after hard work—the hard labour they have to perform in the sun or water. The habit is also contracted by associating with the ganja smokers.

28. Ganja—

Allowance.	Cost per diem.
(a) $\frac{1}{2}$ to 1 anna weight . . .	1 $\frac{1}{2}$ pies to 4 pies.
(b) 2 annas to 8 annas . . .	7 $\frac{1}{2}$ pies to 2 annas 6 pies.

Charas—

(a) $\frac{1}{2}$ anna	3 pies.
(b) 1 anna	6 pies.

Bhang—

(a) 4 annas	1 $\frac{1}{2}$ pies.
(b) 1 tola	■ pies.

29. Ganja is ordinarily mixed with tobacco leaves and exceptionally mixed with bhang, ginger, opium, charas, dhatura seeds, sandalwood, chilly seeds, milk, curd, rosewater, and attar. The object of this admixture is to heighten the intoxicating power or to add flavour.

Charas is ordinarily used with the prepared tobacco to make it soft and easy of smoking.

As regards bhang massala, please refer to answer to question 15.

30. Ganja and charas are usually smoked in company. Bhang is taken both in solitude and in company. Habitual moderate consumers of the *bhadra loka* class and many cultivators take ganja in solitude. The consumption of ganja and charas is mainly confined to the male sex and not to any particular period of life. It is not usual for children to consume any of these drugs.

Bhang is used by both males and females. The latter take it mostly as a medicine.

31. The habit of consuming ganja and charas is easily formed. Once formed, it is difficult to break it off. In case of consumers frequently associating themselves with veteran consumers or obtaining ganja with little or no cost, the moderate habit has the tendency to develop into the excessive habit.

Bhang is much more harmless in this respect.

32. The only social ceremonies in which ganja is used by the people of this district are locally known as "Trinather mela" and "Gorakyanather puja." "Trinath" is a change for Trailakyanath or Mahadeb. The mela is a social gathering in honour of the deity Mahadeb. Hence the name "Trinather mela." The ceremony of worship is not gone through on such occasions, nor is there any specific time for it. It is held after nightfall in the houses of Hindus of all classes. It has now almost fallen into disuse among the higher classes of the community. A few of the *bhadra lokes* now allow the ceremony to be performed at the special request of their dependants of the lower class. There is no idol made on this occasion, as is generally done for other pujas. The people congregate in an open space of the house or in an outer room, where, in front of the assembled men, a piece worth of ganja, of oil, and of betels and nuts are kept ready. With the oil a lamp is lit and with the ganja three kalkis or chillums are prepared and placed before the lamp. The people then begin to sing *Baulah* songs in a chorus, and, while so singing, the persons, three at a time, smoke the three chillums. The ceremony is over with the extinction of the lamp, and the persons then disperse to their own houses. No Brahmin is required for this ceremony, nor do the females take part in the proceedings.

Siddhi or bhang is used on the occasions of Gorakyanather puja and Nowami Dasserah. Goraknath signifies the deity that protects the bovine species. When a cow brings forth its first calf, the deity is invoked for her well being, and also for oblations offered for the blessings thus conferred on the family. Accordingly, on the 20th day after the birth of the calf, a ceremony is held for the worship of the god. On this occasion pills or balls are made of bhang powder or paste mixed with the milk of the cow and sugar. The pills are then distributed among the cowherds and others, who chant a legend of Goraknath. The pills or balls are eaten after the chanting ceases.

On the third day of the Durga puja festival (Nowami), bhang or siddhi is drunk by persons of all classes and ages in the Hindu community, and the same custom is repeated on the following day, Bijaya Dosami, after the ceremony of the immersion of the idol. The custom is not now universally observed. The use of the drug in connection with these customs is regarded essential and is temperate. It is not likely to lead to

the formation of the habit of indulging in the drugs, nor is it otherwise injurious.

33. The consumption of ganja and charas is not favourably regarded by the people, and, in the case of excessive consumers, the general feeling is one of aversion. They are called *ganja-khors* from the fact of their always having a peevish and irritable temper. The Hindus are a peace-loving nation, and anything that tends to disturb their peace of mind is disliked by them. There is no such feeling in regard to the drinking of bhang.

To the Muhammadans, the use of any narcotic is forbidden by their religion, and they look with abhorrence on those that are addicted to it.

The custom of worshipping the hemp plant is not prevalent in this district.

34. It would be a serious privation to the habitual excessive consumers as also to the labouring classes habituated to a moderate use of the drug to forego its consumption. The habitual excessive consumers will be driven to the necessity of resorting to some other kind of narcotic more deleterious and expensive, say dhatura and opium. The moderate consumers of the labouring classes will be deprived of a stimulant in which they find soothing relief from the bodily pains caused by hard labour. For example, the Jaulahs, or fishermen, who, by the very nature of their calling, are required to remain in water for the most part of the day, smoke ganja to invigorate their system, and to deprive them of the drug would be to interfere with their means of livelihood.

35. No; it would not be feasible to prohibit the use of any or all of these drugs. The drug would be consumed illicitly. It is hopeless to attempt prohibition by legal enactments. The prohibition would occasion serious discontent among the consumers, particularly among the excessive and moderate consumers of ganja and of bhang, in certain localities, where it is used as medicine or in connection with the social or religious ceremonies, such as have been described above. The prohibition would lead to rioting. The suppression of the trade in ganja would be followed by recourse to dhatura and opium.

36. No.

37. Yes; ganja-smoking acts more instantaneously on the brain than charas-smoking.

38. No.

39. The smoking of ganja and charas is certainly a less injurious form of consumption than eating or drinking the same. Very few resort to the latter practice when smoking failed to produce sufficient intoxication.

40. Yes; the use of bhang is prescribed on account of its medicinal qualities by the kabirajes. Ganja is used in the preparation of oil by a certain class of native doctors. In cattle diseases bhang is used.

41. The moderate use of ganja or bhang may be beneficial in its effects of one or the other kind as described in (a), (b), and (c). Bhang is used as a food accessory or digestive by the *bhadra lokes* and up-country men, and also for the preservation of health. The labouring classes smoke ganja to obtain staying-power under severe exertion or exposure, or to alleviate fatigue.

Both ganja and bhang, but specially the latter, is used as a prophylactic for cholera.

43. Yes.

44. Yes; it is refreshing and produces intoxication, though its intensity varies with persons of different constitutions. Bhang creates appetite. The effect lasts in the case of bhang ten or twelve hours and in the case of ganja and charas two or three hours. The after-effects of the use of ganja are dullness, languor, and debility. The want of subsequent gratification produces intense desire and uneasiness.

45. If milk and other nutritious food is taken, the moderate consumers of ganja keep very good health. They can work very hard, and are seen in no way deficient, either mentally or morally. The habitual moderate use does not produce any of the noxious effects mentioned in this question.

Bhang is perfectly innocuous.

46. The habitual excessive use of all these drugs produces all these noxious effects.

47. No.

48. No.

51 and 52. No; I do not think the excessive or moderate use of ganja has any connection with the commission of crime in general or with crime of any special character, or with the preparation to commit such crime.

53 to 55. No.

56. Bhang used even in moderation with milk or sugar causes more, and when drunk with salt and black-pepper produces less, intoxication. Ganja smoked with tobacco leaves produces ordinary intoxication. In a very few cases dhatura is used with ganja for personal consumption with the object of obtaining the highest inebriation.

57. See answer to question 39.

58. The present system of excise administration in respect of hemp drugs is working fairly well, but not quite satisfactorily. Various experiments were made in this district for regulating the taxation of ganja, chiefly by means of license fees. With a view to obtain the highest amount of revenue, the farming or monopoly system was gradually introduced till nearly three-fourths of the total number of shops passed into the hands of the monopolists, who offered very large increase of fees. This tended to force up the selling price to an abnormally high rate, and to restrict seriously the consumption, to the great hardship of the consumers, who formed the bulk of the poorer classes. Illicit sales sprang up. The practice of storing up wild bhang became prevalent, and there were many convictions for illicit possession of bhang. Thus, what was gained in license fee was lost in duty. To remedy the abuse, the monopoly was broken up and the licenses were settled with independent purchasers at less fees. The prices went down to the level of the adjoining district, and the sales received an expansion. The consumers felt great relief, and illicit sales gradually disappeared. The decrease in license fees was more than counterbalanced by the increase in duty. From last year, however, the upset prices have been fixed at very high rates, without regard to local conditions.

This has been aggravated by the steady enhancement of duty. The independent vendors being unable to pay increased fees have been driven out by a body of monopolists. The old state of things has again been revived. Ganja is being sold at prohibitive prices in the town—Rs 32 to 40 a seer. The consumption has again been greatly reduced.

I would break up the monopoly again by reducing the license fees, which should be fixed according to the circumstances peculiar to each locality. The upset prices fixed by the Collector should not be raised by the higher authorities without adequate reasons and without consulting him. The checking of consumption should be secured by the raising of duty and not by increasing the license fees. The present mode of fixing the fees by auction may be continued. People can never be made sober by compulsion. Ganja is taken by a large number of poor people as a palliative for pain induced by hard physical labour. It is also taken for the power it gives to the consumers to bear hardship, privation, and exposure in all sorts of weather. Some also take the drug for its medicinal properties. The number of excessive consumers is certainly not large. To deprive a large body of consumers who do not misuse the drug is not a sound and good policy.

59. Except on the lines indicated above, the present system does not, in my opinion, admit of improvement.

60. I am told that ganja is frequently smuggled from the producing tracts. This is possible, because the stock of the cultivators is not properly taken. It should be actually weighed. Mere numbering the bundles is not sufficient, as a dishonest cultivator can pick out sticks of ganja from several packets and make them into a separate bundle for sale. Ganja is also, I believe, picked out in the fields and sold by travellers. It should be placed on the same footing as opium and declared contraband when duty on it has not been paid.

61. Charas is not produced, I think, in Bengal.

62. I do not think any such control feasible. The plant grows wild all over the province, more or less, and to make the owners of land on which it grows destroy it on pain of penalty might be oppressive. Recently such a measure was taken; but it was given up as being almost impracticable.

63. None.

64. No.

65. Yes.

66. Yes; according to the proportion of flowers each variety of ganja contains.

67. None; except to some minor points noticed in answer to question 58 above.

68. Yes; the practice of smoking ganja on the premises of the shop is not very common; but I think it is least objectionable, as it does not lead to any social or moral vice.

69. This is being done in recent years. The excise officers inspecting shops always listen to complaints whenever made. As a matter of fact, the people have not the same prejudice against these shops as they have against the liquor shops, unless they are roused by interested persons. Any complaint or objection on the part of the public is always considered.

70. Not in this district. I believe untaxed siddhi obtained from the wild bhang plants is in use at some places. No case of smuggling in ganja has yet come to notice.

Oral evidence.

Question 1.—I have been sixteen years in the service working in Behar and Eastern and Northern Bengal. The greater portion of my service has been passed in Behar.

Question 46.—My written answer is based partly on experience, such as seeing cases in the lunatic asylum, and cases coming before me in my capacity as Magistrate. But the cases of the latter sort are so few that I should not be justified in generalizing upon them. Other sources of my information are opinions furnished in answer to my enquiries and hearsay. My impressions are general. I have not made a study of the subject.

Question 59.—I certainly do not think that there is any case for total prohibition of the hemp

drugs. The principles by which the restrictions are at present regulated are sound. There may be defects in detail, which, however, are capable of correction without interfering with the system. I should say that the taxation of ganja has nearly reached the practical limit. The retail vendor makes very little profit, and the consumer will not be prepared to pay higher prices than he does now, for he belongs to the poorest classes of the population. This opinion is based on the facts I have given in answer to question 58.

22. Evidence of MR. R. T. GREER, Deputy Commissioner of Darjeeling.

Ganja statement, Darjeeling District.

Year.	Consumption.			Revenue.	Number of cases.
	M.	s.	ch.	R.	
1883-84 . . .	18	21	9	7,980	...
1884-85 . . .	12	27	9	7,518	...
1885-86 . . .	11	6	12	6,995	...
1886-87 . . .	13	8	7	6,805	2
1887-88 . . .	15	25	0	7,972	2
1888-89 . . .	22	0	6	9,049	...
1889-90 . . .	20	13	■	9,167	...
1890-91 . . .	17	32	■	8,883	...
1891-92 . . .	17	32	0	9,090	...
1892-93 . . .	21	9	13	9,136	6
Total	165	17	6	82,595	10
Average	16	21	12	8,259	1

It will be seen from this statement that only to a nominal extent is Darjeeling a ganja-consuming district. The average quantity per year consumed during the last ten years has been 16½ maunds, yielding an average yearly revenue of Rs. 8,259. The population of the district being 2,23,314, the incidence of the tax per head of population comes to (Rs. 0-6-7) seven pies and consumption to quarter of a tola per annum.

The consumers are chiefly confined to the lower classes of up-country residents (dhobies, mochie, sweepers, sadhus, bhakats and fakirs), amongst

plainmen and Nepalese, Rajbansis and Muhamadans in the Terai, and a small fraction of the Bengali population.

The bulk of the hill population, Bhutias and Lepchas as a class, and Nepalese to a great extent, are non-consumers. One shop at Darjeeling (fee Rs. 60 a month) and one at Kurseong (fee Rs. 20 a month) are the only licensed places of sale in the hills.

The ganja plant grows wild abundantly in this district, mostly below the elevation of 4,000 feet above sea level. The Nepalese know the use of this plant, and the sadhus commonly prepare from it a crude sort of ganja for smoking which they call bhang. They never drink or eat the product as bhang, but always smoke it like ganja.

Ordinary consumers use two pies worth of ganja in two chillums a day, and hard smokers more than two annas worth (or a half tola) per day. Bhang is imported from the plains by up-country men for their own consumption.

The consumption of ganja is regarded with disfavor by the general population, certain classes of religious mendicants only being freely allowed the privilege, not for the purpose of intoxication, but as a help for the concentration of their thoughts in divine contemplation.

As regards this district the use of ganja is not abused to any serious extent. The stoppage of the sale of the drug would inevitably encourage illicit cultivation, and drive the present consumers to the use of other obnoxious intoxicants.

Ganja cases do not number one per annum on an average during the past ten years. During the last year several cases of no serious consequence came to light.

23. Evidence of MR. H. F. T. MAGUIRE, Magistrate and Collector of Khulna.

1. I have been in the Civil Service for more than fifteen years, and it has been part of my business to observe ganja.

2. Dr. Prain's statements may generally be accepted except that I think that siddhi and bhang are always applied to the leaves of the male hemp plant, and that bhang also means a decoction made somewhat like tea, but with cold water, from the leaves of this plant. This last is an Uriya expression; otherwise the same names are generally used over the province. It is, however, necessary to explain that generally siddhi means the dried leaves of the male hemp plant, ganja the dried leaves of the female hemp plant, and bhang the hemp tea described above.

3. In Dinajpur and Bhagalpur, and in Cuttack I think. The wild plant is abundant in Bhagalpur.

4. It is called siddhi in Bhagalpur. In the other districts I was not stationed at the time of year when the plant flourishes.

5. I cannot say.

6. Rather dense.

7. Yes; in Rajshahi, Dinajpur and perhaps a little in neighbouring districts, but there is official information about this which I have not got.

8 and 9. See official information.

10. I cannot say. I believe the same as other cultivators.

11. I cannot say. I should think not.

12. Exceptional cases of illicit cultivation have come to my notice from time to time, but I cannot now say where exactly.

13. To Rajshahi and other neighbouring districts. I think that ganja might probably be cultivated anywhere, and have met isolated instances of illicit cultivation in many districts.

14. Ganja is prepared under official control in Rajshahi and the neighbouring districts. I have never seen charas, and know nothing of it. Bhang, meaning hemp tea, is prepared in Orissa. I cannot give figures showing how much is prepared of each.

16. I think that bhang is generally prepared by the people in their houses. I think it is generally prepared from the male hemp plant. A sort of ganja is prepared from the wild plant wherever grown, but except when prepared from female hemp it is very weak.

18. Ganja, I know, deteriorates by keeping, but I cannot answer the other questions.

19. So far as I know, ganja is only used for smoking. I know nothing of charas, but am told that it is eaten.

20. No general answer can be given to this question.

21. I am told that round ganja is the strongest and is therefore preferred by regular smokers. I am also told that it is too strong, and so other people prefer 'chur' which is weaker. 'Flat' contains too many sticks to be popular.

23. In this connection I take bhang to mean the same as siddhi. It is used for smoking, but I cannot give figures.

24. So far as I know, bhang is always used as a drink, but I cannot give figures. I think it is not eaten. I have not heard of its use as a drink except in Orissa.

25. I have not been in any one place long enough to reply to this question.

26. This would require special observation which cannot, I should think, be applied.

27. I think that no answer can be given to this question.

28. This cannot be answered because (1) no one will give correct information; (2) in no intoxicant can an average be laid down—what is habitually moderate for one person would be habitually excessive for another.

29. Ganja, so far as I know, is usually taken pure or mixed with tobacco, more commonly the latter. The object of this is to improve the flavour, I think. I have not heard of dhatura being so used.

My Uriya servant who may be an expert tells me that bhang massala is made of *elaichi*, *kabab-chini* and *laong*. He also says that sugar and milk are mixed with bhang; *elaichi*, etc., are all unknown to me.

30. I think it is generally practised in solitude, chiefly by males and not by children. I have seen ganja-smokers of any age from 20 upwards.

33. Nearly everywhere if you ask a man if he smokes ganja, he will say no, whether he does or not. This shows that there is some public opinion against the practice. But it is impossible to say whether this is due to an idea that we

Europeans disapprove of such a practice or to a real feeling of shame. When a man who has denied smoking has the practice brought home to him, he does not seem to mind much and generally admits being a moderate consumer, and I have known people admit without any shame at all. I know of no worship of the hemp plant. There may be some in Rajshahi.

34. I should think that it would be a serious privation to any one to forego his favourite stimulant.

35. I think that if the use of these drugs were prohibited, the drug would be sure to be consumed illicitly. It is rather hard to prophesy more than this.

36. No; I do not think that any one who has been in the habit of taking ganja ever takes alcohol instead. Ganja intoxication is much cheaper and any one accustomed to one form of intoxication is not likely to change it for another.

38. Round ganja is said to be stronger. In its effects chur ganja would be the same as flat. As a fact there is more fermentation in round ganja than in the other sorts.

39. It is certain, I think, that the least injurious way of taking hemp is in the drink which I have called 'bhang.' I have never seen any one eating the drug, and do not know what effect that would have. Smoking seems to have more effect than drinking as in bhang; but what is meant by the words 'injurious form of consumption' I do not know. They seem to me to be a *petitio principii*.

42. Yes, I think it is harmless. I have not answered the last two questions because they are of a medical sort. But I have known people take ganja moderately without any harm. I remember meeting a barber once, about 9 A.M., having some ganja, and asked him 'but does not this make your hand shake?' and he replied 'but does it shake?' and then he said that he had taken so much ganja—not much—for many years, and found that it did him good.

43. I believe so.

44. I have been unable to find an admitted habitual consumer who can give me materials for answering all these questions. But the drug certainly produces exhilaration at the time.

45. This appears to be a medical question.

51. For some reason or other habitual criminals are either really addicted to or are stated by the police to cause prejudice to be addicted to some form of intoxication, more commonly liquor in Behar, and more commonly ganja in Orissa; elsewhere in about equal proportions. Perhaps the criminal classes require more 'keeping up' or the taste which is an expensive one urges to crime. Yesterday I was talking to a confessed ganja smoker, and asked how much he smoked, and he said ½th tola a day; and I said 'was that enough?' and he told me that this was all he could afford and that if he took more than that he must steal.

53. This is a medical question. It is impossible to tell how any form of intoxication will act on any particular brain.

54. I do not remember such a case, though I have often heard of alcohol being so used.

55. Yes. I cannot answer the latter part of the question.

57. I have not heard of ganja being eaten. Bhang may be prepared from ganja (meaning the female hemp plant), but I do not know if this is

so. Charas, I am told, is always eaten, but this is what my Uriya servant says. I know nothing of it.

58. I have always had to carry out orders in reference to Excise Administration. I cannot at present suggest any improvement.

62. I am not sure if this question intends 'bhang' as I have used the word. If so, I think that bhang is very harmless, and that no control is necessary.

63 and 64. No.

65. Intoxication by ganja is the cheapest intoxication of all.

66. The difference is due to the fact that flat ganja contains a large amount of sticks which are of no use. At the same time, as already stated, I am told that round ganja is more intoxicating,

and I believe this to be due to greater fermentation. Then chur or broken ganja contains no sticks at all.

67. No: bhang meaning what I call 'siddhi.'

68. If this means where they may be consumed on the premises in the sense that liquors may be so consumed in English public houses, I think not. Ganja is not generally consumed in the shop where it is bought. I do not understand the latter half of the question.

69. Yes. Some enquiry is made, if I am in charge of a district, by the Excise Deputy Collector or myself if I happen to be in the neighbourhood. Sometimes enquiries are made by Excise subordinates. Certainly local public opinion should be considered on every question.

70. I think there was some smuggling from Native States into Cuttack when I was there, but I am not sure. Duty is generally paid, I think.

24. Evidence of MR. W. R. BRIGHT, Deputy Commissioner of Palāmau.

1. I have been in charge of Excise, both as subordinate officer and district officer for some years past.

2. They are known as chipta (flat), gol (round), and chur (broken). The last is also locally known as "jatt."

3. I have seen quantities of wild bhang in the Bettiah sub-division, and have seen ganja of an inferior kind introduced from Nepal.

4. It is there called bhang.

6. The bhang grows very densely, especially near villages.

7. It is cultivated in Rajshahi, but I have never been there.

8 to 12. No information.

13. (a) Yes. To Rajshahi I believe.

(b) No information.

(c) There is no wild bhang in this district, which would seem to show that the climate is unsuited for it.

14. *Vide* answer above.

16. In the Bettiah sub-division it was usually reported that the people used the wild bhang as a medicine for cattle.

18. These drugs deteriorate by keeping, and quite lose their effect in time.

They will keep with care up to about two years. Damp affects them most injuriously. Deterioration can be prevented by keeping the drugs in tin-lined boxes in dry properly-built godowns.

19. Charas is not used in this district. Ganja is generally used for smoking, but it is sometimes used as a medicine in cases of diarrhoea and also, I am informed, in itch complaint.

20. I cannot give the proportions; all classes seem to smoke ganja except precise Muhammadans.

21. In this district chipta and chur are most consumed. The ganja-smokers whom I have questioned say they prefer the chur.

22. The ordinary Rajshahi ganja is used.

23. Not so far as I can ascertain.

24. All classes except rigid Muhammadans drink bhang without restriction of locality.

25. It is on the increase in this district.

	Bhang.			Ganja.		
	M.	s.	ch.	M.	s.	ch.
1884-85 . . .	0	0	0	7	31	8
1885-86 . . .	0	0	0	6	31	4
1886-87 . . .	12	10	0	8	19	8
1887-88 . . .	12	24	0	8	31	0
1888-89 . . .	11	0	2	9	29	12
1889-90 . . .	17	19	11	10	19	6
1890-91 . . .	21	7	12	11	35	0
1891-92 . . .	17	10	7	13	20	7

I cannot give any sufficient reason. Increase of population has no doubt something to do with it.

26. I cannot give this.

27. Bhang is drunk as a sherbet by all classes. Ganja is consumed a good deal by the agricultural classes after their day's work, but is also consumed by the richer men. The former use it to do away with fatigue, the latter for their own pleasure, and also for the satisfaction of their carnal desires, as it increases or is said to increase retentive power.

28. (a) A habitual moderate consumer takes one or two or three chillums a day of ganja and about four annas weight of bhang.

(b) I was told of habitual consumers who took ten to twelve chillums a day but the case seemed unusual.

Bhang, they told me, was consumed up to one-eighth of a kacha seer (*i.e.*, rather more than a pukka chattak) a day. A chillum of ganja took two rattis weight. Ganja is sold at Rs 20 a pukka seer, bhang at Rs 1-8 a kacha seer.

29. Ganja is generally used by itself, but is sometimes used with tobacco leaves. Bhang is usually mixed with other ingredients. The chief ingredients are souf, kasni, kira seeds, dhanian, golmirrich, loung (cloves), elaichi, khurfa seeds. Gur is sometimes used with it, and sometimes milk by people who have to sing. Dhatura is said to be occasionally used to make the mixture very strong.

30. Ganja is usually smoked alone, but bhang is consumed in company. The male sex are the most usual consumers. It is not usual for children to use either of these drugs, but I have no doubt some do so.

31. The habit of ganja-smoking is very difficult to break off, but I am told that bhang has no such effect. From what I learnt from ganja-smokers, their consumption is only limited by their purse.

32. The higher orders of Hindus in Bengal almost universally use bhang at the Bijaya Dasami festival, but the practice is said not to be generally observed in Behar.

33. The use of ganja is certainly looked upon as a fault in a man's character, and the question whether a witness consumes ganja, is often asked with a view to discredit a man. This does not seem to be the case with bhang. This dislike of ganja-smokers has nothing religious about it, but is attributed to the idea that ganja-smokers are idle, hot-tempered, useless fellows.

In Bengal, and also I am informed in some places here, quantities of ganja are given as an offering to Mahadev on the night of the Shiv Chatardashi.

34. It would be a serious privation to the habitual ganja-smokers to give up the drug, as it is a habit very difficult to break.

35. The use of bhang could not be prohibited, as it would be, I think, impracticable to extirpate the wild plant. If ganja production were prohibited, no doubt there would be smuggling from the Native States, *e.g.*, Nepal. I hardly think ganja consumption can be prohibited, though I dislike the drug particularly. I should much rather see the price increased and their consumption automatically checked. The prohibition would no doubt be followed by recourse to other intoxicants, probably alcoholic.

36. I have no information.

37. I have no knowledge of charas.

38. Not, if they are of the same quality.

39. Not known.

40. Both ganja and bhang are used by the Ayurvedic school of medicine for their medicinal qualities. Bhang is used as a medicine for cattle, but I do not know for what particular form of disease.

41. (a) Bhang is said to be astringent.

(b) Yes, both ganja and bhang are used for the purpose.

(c) This is said to be the case.

Many of the higher classes in Behar use bhang as a household medicine. The labouring classes habitually use it to alleviate fatigue.

42. This is a question more for a medical expert.

43. Yes.

44. It is said to be refreshing. Yes, ganja produces intoxication, and so does bhang. Ganja is said to allay hunger, and bhang to create appetite. The ganja-smokers whom I questioned said that the intoxication of bhang lasted from one to three hours according to the quantity. The after-effects are headache sometimes and giddiness. The want of subsequent gratification does certainly produce longing or uneasiness in the case of habitual ganja-smokers.

45. (b) Ganja apparently does.

(c) Yes.

(d) Dysentery and bronchitis.

(e) It is said to do this.

(f) It is said to deaden the intellect, but not to produce insanity.

46. The habitual excessive use of ganja certainly causes temporary insanity sometimes. I

have myself seen two cases attributable to this cause, one when I was Deputy Commissioner of the Sonthal Parganas, and one lately in the jail here. In the latter case, which is fresh in my memory, a man was sent to jail for observation as a lunatic. The Civil Medical Officer describes him as "always after ganja—would not even take food, and was very insolent and dangerous." After being kept for less than a week in jail, he entirely recovered, and I released him. He was an habitual and confirmed ganja-smoker. The former case was one of a respectable clerk, who had twice got fits of temporary insanity which was attributed to excessive ganja-smoking, if I remember rightly.

47. No.

49. I am informed by the Civil Medical Officer that it (ganja I believe) is so used by prostitutes. He says that owing to the effects which it produces, it overstrains the system, causes early debility and brings on temporary impotence.

50. The same authority informs me that it is not used excessively as an aphrodisiac, but that people who consume it excessively are usually impotent.

51 and 52. I have no information.

53. The Civil Medical Officer informs me that he has heard of cases of temporary homicidal frenzy amongst excessive ganja-smokers.

54. No information.

55. I have not met with a case.

56. Admixture with dhatura is said to be dangerous.

57. No information.

58. I think the system is as good a one as could be devised.

62. It would not be feasible I think as the plant grows wild in profusion in some districts.

63. As long as ganja and bhang are consumed I have no objection to the present system of wholesale and retail vend.

64. No.

65. I would like to see ganja certainly more heavily taxed. For two pice a man can get intoxicated on ganja, when it will cost him even in this district one-and-a-half to two annas to get intoxicated on alcohol. I regard intoxication from ganja as infinitely more deleterious than intoxication from alcohol, and would certainly like to see ganja more heavily taxed. Bhang is a more difficult question, as it is so easily prepared from the wild plant.

66. There should be different rates of taxation, as a great part of the weight of chipta consists of the weight of the stalk, and this is also the case with gol, though to a much smaller extent.

67. No; except that the taxation of ganja is not high enough.

68. Yes. There are several shops licensed for the sale of both ganja and bhang in this district.

69. Shops are not opened in places to which the people object, and if any objection were raised, I should certainly change the site. But as the shops are only for the sale and not for the consumption of the article, they would not be objectionable to neighbours. New shops are opened only where there is a real necessity.

70. Some small amount of ganja used to be smuggled across from Nepal into Bettiah subdivision. I know nothing of the Nepalese excise system.

25. *Evidence of MR. N. K. BOSE, Officiating Magistrate and Collector of Noakhali.*

2. These definitions may be accepted.
3. Hemp plant is found occasionally to grow spontaneously in certain localities of the district. It is nowhere abundant.
4. Ganja, siddhi, or bhang.
5. Have no experience.
6. Scattered.
7. No cultivation of hemp plant in this district.
14. No.
15. None prepared in this district.
16. None prepared in this district.
17. None.
18. I have no experience. Vendors say that ganja deteriorates within a year, and quite loses its intoxicating quality in three or four years. Exposure is said to be the cause.
19. Yes; except such as are used for medicinal purposes, in which case they are mixed up with other ingredients and administered internally or applied externally.
20. Charas is seldom, if ever, used in this district, but ganja is smoked by the following classes of people:—(1) jalias (fishermen), (2) dhobis (washermen), (3) religious mendicants (such as sanyasis or fakirs, bairagis), (4) palki-bearers, (5) idlers and bad characters. The proportion of the people using it is very small, not even one per cent.
21. Round ganja is preferred; but owing to its high duties, the demand for flat ganja is greater.
22. Charas is not procurable here.
23. No.
24. Bhang is drunk by up-countrymen whose number is very small in this district. The natives of the district do not use bhang in any form.
25. For the last two years there has been a decrease owing (1) to higher duty, (2) to the high price of food grains.
26. (a) The majority are habitual moderate consumers.
- (b) Very few.
- (c) About one-third of the ganja-smoking population is estimated under this class. The number is estimated at 1,000.
- (d) Very few.
27. The Bairagis as a class are all excessive smokers. They are professional beggars, and form the bulk of ganja-smoking population. Next comes the class of day-labourers. In this class the number is almost equally divided among Hindus and Muhammadans. Among the Baishnabs, they say, the practice is sanctioned by their religion. The day-labourers take up this practice under the impression that it enables them to undergo fatigue and exposure without their health being impaired.
28. Habitual moderate consumers of ganja seldom take more than one or two annas' worth daily, and habitual excessive consumers have been known to take a rupee worth a day. Flat ganja is sold at 3 tolas per rupee and round at 2½ tolas.
29. Dhatura seeds are not known to be mixed with ganja by any smoker in this district. Powdered tobacco leaves (dry) and ganja mixed

together are used by some. No bhang massala is known here.

30. As a rule neither ganja nor bhang is consumed in company, nor is solitude particularly sought for. It is mainly confined to the male sex and to ages ranging from 25 to 60 years. Children are never known to use any of these drugs.

31. (a) Yes.

(b) They say it is difficult to break off the practice.

(c) Yes.

32. Bhang is drunk in small quantities by Hindus on the last day (Dasami) of the Durga Puja. It is indulged in very small quantities and only once a year, and does not lead to the formation of habit.

33. Ganja-smoking is not regarded as respectable. It is rather regarded as degrading. Not so bhang drinking. The sentiment mentioned above is attributable to the injurious effect which the excessive use of the drug is known to produce upon the moral nature of the consumers. In this district a god named Trinath (Trinity) is worshipped by lower classes of people, who is, *par excellence*, the god of ganja. Smoking of ganja is a *sine quâ non* of the worship. Many begin smoking in this way, and eventually become inveterate smokers.

34. It would certainly be a privation to the small class of people who have made themselves slaves of the habit of ganja-smoking, but hardly a serious privation.

35. Prohibition cannot be enforced without total extinction of the plant, which grows wild everywhere. Prohibition will certainly produce discontent; but as the consumption of ganja is restricted to a small number of lower classes of people, there will hardly be any political danger. The stoppage of ganja-smoking will most probably be followed by recourse to alcoholic stimulants.

36. No.

37. I have no experience.

38. In degree.

39. Ganja is always smoked. Bhang is both eaten and drunk.

40. Yes; bhang is an invaluable medicine for all kinds of bowel complaints, specially dysentery; ganja for asthma, tetanus, etc. Kabirajes use it extensively. Both bhang and ganja are used in the treatment of cattle diseases.

41. Moderate use of bhang is said to be beneficial as a digestive. Ganja is known to give a certain amount of staying power under severe exertion and to alleviate fatigue. By far the best effect of it is considered to be its power of protection against all kinds of exposure, damp, and cold; and as such it has a decided effect against malaria.

I refer to moderate habitual use of the drugs. I have no experience of charas.

42. Is beneficial when taken in moderation.

43. Yes.

44. It is refreshing after exertion. To be refreshing it must produce intoxication: short of intoxication it is not refreshing. It allays, rather dulls, hunger. The effect rarely lasts more than three hours. No after-effects are left. Want of

subsequent gratification produces a longing, which is, however, easily controllable.

45. Habitual moderate use of ganja or bhang is not known to produce any noxious effects, physical, mental or moral.

46. The Assistant Surgeon, Doctor Nobin Chandra Dutta, writes as follows :—

“Habitual excessive use of ganja produces decidedly injurious effects upon the physical, mental and moral nature of man. It impairs the constitution. Excessive ganja-smokers are, as a rule, thin and emaciated. Their appetite and digestion fails. I have knowledge of more than one case of asthma which could be attributed to no other cause. Instances of dysentery from excessive use of ganja have also come under my notice. Impairment of moral sense is not marked. It does not induce laziness or habits of immorality or debauchery. Excessive ganja-smokers are known to be sexually weak and incompetent. It certainly dulls the intellect and weakens the mind. I have no doubt of insanity being produced by excessive smoking of ganja. Though insanity is marked by violence and excitement and is of a distinctly maniacal type, it may be temporary or permanent. I have experience of one case of temporary insanity re-induced by use of the drug after liberation from an asylum. I have no knowledge of any symptoms of ganja insanity which may be called typical. I have known cases where no desire for obtaining relief from mental anxiety or brain disease was found; but pure love of amusement in bad company has induced the ganja habit, which has ultimately ended in insanity. I have no knowledge of insanity tending to indulgence in ganja by a person deficient in self-control through weakened intellect.

“I have at this moment in my mind's eye a man whose whole course of life as a ganja-smoker, from the 18th to 33rd year of his age, I have had opportunities of watching. I consider this man a typical case for illustrating the effects of ganja-smoking on the physical, mental, and moral nature of man. As a boy, this unfortunate man possessed a singularly amiable disposition, and more than average intelligence. Physically he was not well-built; but his constitution was by no means worse than that of the average native of Lower Bengal. When he was about 18 he fell into bad company, and contracted the habit of smoking ganja, which he quickly indulged in for about two years. Gradually he rose to excess; then certain very remarkable changes came over him. He ate little; sometimes he omitted one or two meals. There was a tremor in his limbs and voice, and occasionally his eyes were bloodshot. A sort of dogged, determined look appeared on his face, and he grew irritable and quarrelsome. At times he would get into a sudden passion for a trivial cause, and become extremely noisy and violent. He had certain absurd ideas of his own about things, and no argument or reasoning could convince him of their absurdity or incorrectness. According to these ideas, he insisted upon doing certain things to the great annoyance of his friends and relatives. He was so determined that he could never be dissuaded unless by actual force. He was at this time absolutely truthful in what he said or did, and honest in pecuniary matters. He carried his truthfulness sometimes to a most ridiculous length. At one time he was living with a friend who used to find fault with him for his ganja habits, and reproved him for being

incorrigible. This made him very angry, and he left the house swearing that he would never pass its threshold again. He kept his word by passing in and out through the windows.

“In the growing excess in smoking he wasted away in physique and looked quite thin and emaciated; but his habits were active and could bear cold, damp, and exposure to an extraordinary extent. In the last eight years it has been his practice to get up at about 3 o'clock in the morning in all seasons, and from that hour till 8 or 11 o'clock he is found standing often up to his waist, and sometimes up to his neck, in water in the river or tanks performing his ablutions or puja, without being any the worse for it. He is seldom found to use any warm clothing in the winter. In the last two years he has developed signs of insanity. He sleeps badly, goes without food for days, lies and cheats, travels distances for no apparent purpose, talks incoherently, and is angry at the slightest provocation, and sometimes on no provocation at all, when he is very violent, bursting into fits of uncontrollable frenzy.”

47 and 48. Have no experience.

49 and 50. Ganja is smoked as an aphrodisiac by men. The aphrodisiac action of the drug lasts during the period of intoxication produced by it. Prostitutes are not known to use it as such. Excessive use of ganja tends to produce impotence.

51. Moderate use of ganja or bhang has no connection with crime.

53. The effect of excessive indulgence in ganja is either stupefying or exhilarating, according to the constitution of the man using it.

The Assistant Surgeon, Doctor Nobin Chandra Dutta, writes to me as follows :—

“I have known a case of a ganja-smoker who had to be kept tied down for more than twenty-four hours to prevent his causing violence to his neighbours and to members of his family. I should think this was a case of temporary homicidal frenzy.”

54. Criminals habituated to ganja-smoking are known to fortify themselves to commit premeditated acts of violence by repeatedly smoking it. Those who are unaccustomed to it sometimes drink bhang for the purpose.

55. Bhang is used, often mixed with dhatura seeds.

56. Admixture of dhatura with ganja enhances the intoxicant effect of the latter. Dhatura seeds are mixed with bhang for administration to others with criminal intent.

57. No experience.

58. Is capable of improvement.

59. The shops are now settled by competition, and owing to a paucity of bidders some shops are settled at a very low fee. The result is the retail selling prices of ganja are different in different shops. If the system of issuing ganja to licensees only in proportion to the amount of license fees paid by them be introduced, not only would it reduce the quantity of ganja sold, but would also bring the retail selling prices to one and the same level, prevent unhealthy competition, and check illicit sales.

60 and 61. Nil.

62. No control is necessary or practicable.

63 and 64. No.

65. Seems unreasonable.
66. Yes; on the principle of their different intoxicating power.
67. No.
68. There are none in the district.
69. Yes; as far as practicable.
70. I have made enquiries into the question of hill ganja. I have questioned several people of the locality, and also some "Tipperahs" who had

come down to Amlighata from the hills. There is a consensus of opinion that no hill ganja is grown within a day's journey from the British frontier. I find that in 1870 a specimen of hill ganja was procured for examination, and the Civil Medical Officer reported that hill ganja is much inferior to the Rajshahi ganja in respect of its power of intoxication. The Minister of the Maharaja of Tipperah also stated that ganja was not grown in the Maharaja's territory, except in a very small quantity, which is far from sufficient to meet the local demand.

26. Evidence of MR. L. P. SHIRRES, Magistrate and Collector of Midnapur.

1. Deputy Collector, Sub-Divisional Officer, and Collector in several districts; Junior Secretary to the Board of Revenue; Under-Secretary to the Government of Bengal in the Excise Department; Under-Secretary to the Government of India, Excise Department.

2. Yes; ganja, ganjika, turitananda, bora-tamak, sul fa, and suka-tamak.

3. The plant grows spontaneously in this district, but not abundantly. No doubt it might be easily cultivated, as a few cases occur of Kabirajes growing it illicitly for medicine.

4. See answer to question 2. The *Cannabis sativa* is the plant referred to.

5. The soil of this district is partly alluvial, partly laterite, and the plant grows on both. It is well known that the plant grows all along the Himalayas, in the uplands of Central Asia and all over India, although it is greatly affected by different conditions of climate. In the uplands the resin in which the narcotic principle resides exudes and is collected as charas; in the plains, where cultivated, it is found in the virginal female blossom, and when allowed to run to seed in the plains, it is found in the leaves, whence it is extracted in the form of bhang. In the Excise Manual, however, Section XIX, paragraph 3, page 152, siddhi is defined as the dried leaves of both sexes, whether cultivated or uncultivated. The preceding statement is, I believe, to be found in Babu Hem Chunder Ker's report, the only book of reference on the subject until Dr. Prain's recent report. Considerable quantities of charas are imported into the Punjab and the North-Western Provinces from Samarcand and other places, and probably some of this finds its way into Bengal. But all the statistics relating to this will be before the Commission. It used to be cultivated in the Jessore district, but the cultivation there was given up many years ago; I do not know for what reason; and the cultivation in these provinces is now confined within a ring fence in Northern Bengal. Rajshahi used to export a large quantity to the North-Western Provinces, but the export has fallen off, as that province now gets its supplies from the Central Provinces, where it is more lightly taxed. It is believed to be cultivated in the Tributary States of Orissa, whence it is imported into Orissa under the name of Gurjat ganja. It is also, I believe, cultivated in Assam, and I have known good ganja smuggled into Noakhali from the neighbouring hill tracts, where it has apparently been grown. In Madras it appears to grow wild freely, but is not cultivated, taxed, nor consumed. That province consumes opium instead of ganja.

6. Scattered.

7. Not in this district (as above noted, a few plants are sometimes illicitly grown by Kabirajes).

8 to 10. I have no knowledge beyond what is to be found in published reports. There is no cultivation in this district.

11 and 12. So far as I know, there has been no such special selection in the case of ganja as has made the cultivated fruits of Europe different from the corresponding wild fruits. That there is a marked difference, however, between the cultivated and the uncultivated plant is clearly shown by the fact that the Excise authorities are able to tax the wild plant (siddhi) on an altogether different scale and to allow it to be freely circulated. Probably this is due as much to the soil being properly prepared and the plants allowed free room as to the removal of the male plants.

13. See above.

14, 15, 16. Ganja, charas, and bhang are imported and not made in this district; that is to say, the dried leaf from which the decoction or infusion called bhang is made is imported. Bhang could be prepared from the leaves of the wild plant, and in fact, as will appear from the section of the Excise Manual quoted above, it ordinarily is so.

17. The consumers of bhang are chiefly men from up-country. It is also mixed with milk, spices, etc., and used as a medicine for dyspepsia. Charas is mixed with tobacco and smoked by a few of the well-to-do people. Ganja is used by the fishermen and the lower classes generally, partly, no doubt, because it is a less expensive habit than liquor or opium.

18. The drugs lose their narcotic properties, as ordinarily kept, in little more than a year. Ganja is kept in tin-lined chests in dry golas, but the Board of Revenue are conducting experiments to see if it will keep better if hermetically sealed.

19. Yes.

20. See above. There is hardly any charas consumed in this district. The consumption of ganja is 71 maunds a year, which, if all be taken by moderate habitual consumers, would supply about one in two thousand of the population.

21. Only round ganja is used in this district.

22. Foreign. Last year the charas used was imported from Amritsar. Eighteen seers were imported, of which seven were consumed and eleven re-exported. There are no habitual consumers. Seven seers would be enough for about fifty habitual moderate consumers in a year.

23. No.

24. Bhang is largely used by up-country men, and a few of the Bengalis also use it.

25. Consumption of ganja here has increased by about 29 per cent. in the last ten years, probably at the expense of opium and liquor. The former has increased, but not commensurately with the population; and though statistics for the latter are not available, there can be no doubt that there was a great decrease. Last year was a bad year, and the consumption of liquor fell by 19, while that of ganja increased by 6 per cent.

26. Generally from the lower classes of the people.

27. An habitual moderate consumer would take half a tola of ganja or siddhi and about six grains of charas. Excessive consumers would take more than twice as much.

28. Ganja is mixed with tobacco, charas with tobacco and molasses. With siddhi milk, spices, etc., are sometimes mixed to form what is called a "majum" numerous references to which will be found in the latter part of Baber's Memoirs. Dhatura is not mixed with charas, but is sometimes mixed with siddhi to make it more intoxicating.

30. Ganja and charas are consumed both in solitude and in company by adult males and public and low class women. Children do not consume it.

31. The habit is easily formed and difficult to break off. As to the development of the moderate into the excessive habit, it seems to me that if the fact had been realized that the oriental differs greatly from the inhabitant of Northern Europe in this respect as regards all nerve drugs, the Commission would never have been appointed. No doubt, this can be satisfactorily explained by the over-pressure to which we are subjected, but the fact remains that whatever form of stimulant the native of this country consumes he as a rule takes in moderation, and very, very rarely is mastered by the habit.

32. On the Bijaya day of the Durga Puja bhang is consumed as a rule by Bengalis of both sexes and of all ages. Its use is regarded as essential. The lower classes indulge in it to excess and the respectable classes take it in moderation. This is not likely to lead to the formation of the habit.

33. Ganja is for the most part used by the lower classes. To be a ganja smoker therefore is synonymous with being a "low caste man." If a man of a higher class smokes ganja he is looked down upon. But this, I think, is because he adopts a vulgar low caste custom. So might a taste for gin be regarded among the upper classes in England. Ganja has also got a very bad name, and is supposed to lead to madness, etc., just as, no doubt, many respectable persons in England associate gin-drinking with wife-beating and other brutal crimes. The belief, which is certainly "in the air," that ganja is very deleterious has in my opinion been largely fostered by, if it is not entirely due to, the fact that the *bhadra lok* of Bengal take opium and not ganja, and "compound for sins they are inclined to."

34. Ganja is never allowed in jails, and I have never heard of any evil resulting from the supply being cut off.

35. I do not think there would be the slightest difficulty in abolishing the use of ganja. For the drug to be consumed illicitly it must first be grown illicitly, and if simultaneous action were taken in Bengal, the Tributary Mahals of Orissa, the Central Provinces, Assam, and any other place, if

there is any, where it is grown, this would be practically impossible. Here and there, no doubt, a few persons would grow a few plants for private consumption; but it would be impossible for any trade to be carried on, and this would soon cease. There would be serious discontent among the consumers, but this might be almost entirely obviated by preceding the abolition by a progressive increase of duty. The discontent would never amount to a political danger such as would be caused by the abolition of opium, which would set the whole country against us and probably lead to risings amongst the Sikhs.

36. In this district at any rate ganja is being substituted for alcohol, not alcohol for ganja. I think there is ample proof that the majority of men prefer to take some stimulant, and that the maximum of work cannot be obtained without it. There is also, I think, ample proof that the stimulant may take the place of another. The manner in which tea, coffee, and tobacco have taken the place of alcohol is a striking instance. An Excise map of India will also show that when one stimulant is not used another is, and I believe that the history of each individual district will show that when the consumption of one is restricted another takes its place.

37. The effect of charas is more transient.

38. There is no difference in kind, but the form which contains most ganja blossom contains most resin and is therefore the strongest.

39. Smoking is generally believed to be the most hurtful. Bhang, I have often heard it said, is, when taken in moderation, no more harmful than the tea taken by Europeans.

40. Bhang is used here as a cure for dyspepsia. I have known it used as a charm to cast the devil out of a lunatic. It proved unsuccessful.

41. (a) See above.

(b) It is used by people who undergo great exertion, but whether there is any causal connection between the two I cannot say.

(c) and (d) I do not know.

42. I should define immoderate use as one which was hurtful, and I should therefore answer this question in the affirmative.

43. They are not offensive because of their moderate consumption.

44. Refreshing. Not intoxicating. Creates appetite, but does not allay hunger.

45 to 50. I leave these questions to medical witnesses.

51. The proportion of habitual consumers among bad characters is comparatively small. These drugs are used by the lowest classes, and these classes, as in other countries, furnish the largest proportion of criminals. Whether there is any causal connection between the two I cannot say.

52. It is well known that different people under the influence of alcohol behave very differently. Some go to sleep and others fight. I presume it is the same with ganja. Bhang, however, is said when taken in excess to produce stupefaction, while ganja excites.

53. When I was in Backergunge, where I served for two years, persons charged with violent crime frequently came before me, and I used to enquire whether they took ganja. In many cases I found they did so, and it was not till some years afterwards that it struck me that I had, for the

reason stated above really no proof of any connection between the two.

54. They are said to be so used.

55. Yes; but complete stupefaction is not produced without admixture.

56. Spices, rose-leaf, sweets, milk, curd, and cucumber-seeds are mixed with bhang, the purpose, it is said, being to temperate the intoxicating effect. Dhatura is used by hard smokers to aggravate intoxication. A preparation known as thandai is sold, the ingredients of which are chiefly spices and cucumber-seeds.

57. Not in this district.

58 to 60. If it is proved that ganja is more hurtful than other stimulants, it should, I think, be abolished, otherwise I have no fault to find with the system. Personally, I cannot say whether it is worse or not. I am inclined to think that it is, but I do not feel at all certain.

65. In Bengal it is only recently that ganja has been so highly taxed, and it is still, as far as I can learn, the cheapest intoxicant. In the Central Provinces the tax used to be very light indeed (I think only Rs. 1-4-0). I do not know what it is now.

66. Yes, because the plant contains more leaves and twigs and the others more blossom.

67. No.

27. Evidence of MR. E. H. C. WALSH,* *Officiating Magistrate and Collector of Cuttack.*

2. The above definitions may be accepted. Gurjat ganja is only dried, and not flattened or rolled like the Bajshahi drug. There is no sale of charas in this district.

3. A species of ganja known as Gurjat ganja grows in the Gurjat estates bordering on the Districts of Puri and Cuttack, and (illicitly) will grow spontaneously in the bordering portion of those districts.

4. Siddhi, bhang, subji, and patti; and the differences between them are such as are given in the definitions; charas is a name not in use, and that form of the drug is not consumed.

5. It grows either on the plains or at a slight elevation on hill sides. It is generally grown on a dry and loamy soil, and a damp soil does not suit it. I cannot say the height of elevation up to which it will grow.

6. Scattered in the cases where I have seen it.

7. There is no licit cultivation in Orissa, but in the Tributary Mahals of the Gurjat, the variety known as Gurjat ganja is grown extensively.

8. I cannot say. Enough is grown for local consumption, and also for export into British territory. The area has no doubt increased since 1889, when the prohibition against growing it within three miles of the British border was withdrawn, and that amount of extra land, therefore, left available for its cultivation, where desired.

9. The plants are grown from seeds towards the end of the rains. They take about six months to come to maturity. They are then cut down and left to wither. When dry, the tops of the female plants containing the flowers are cut off and tied together. This constitutes ganja. The leaves are also collected for patti.

10. There is no restriction of class or caste.

11. Yes.

NOTE.—In all these answers I refer only to Gurjat ganja, and do not refer to the Bengal or Rajshahi plant, of which I have no personal knowledge.

12. Yes. In the Gurjat States. The male plants do not appear to be systematically destroyed.

13. Its cultivation is forbidden in Orissa. Any dry loamy soil would be suitable for its cultivation.

14. Not prepared in Orissa, but in the Tributary States. I cannot give the extent, as there are no figures available.

15. Gurjat ganja is smoked, in which case it is pounded up and mixed with tobacco. 'Patti' is

mixed with water and drunk. Either ganja or patti made up with sugar is eaten in the form of a sweetmeat called majum. It is also made into small pills with spices, which are convenient to carry on a journey.

16. Yes. Charas is not prepared so far as I know in the Gurjats.

17. By no class in particular. Any cultivator who has grown the plant.

18. They deteriorate by keeping. Damp is injurious to it; insects also get to it sometimes. The remedy for the above two causes is to keep it well protected and in a dry place, and as much as possible shut out the air, to prevent loss of its aroma by evaporation.

19. Ganja is smoked; drunk as patti mixed with water, and eaten made up into a sweetmeat as majum or made into a pill with spices.

20. The lower classes chiefly, and fakirs almost universally.

21. The round ganja is preferred, and the largest quantity of this kind is sold in consequence.

22. Charas not in use.

23. I do not know of such cases. Ganja is generally the drug smoked.

24. I cannot give the proportion.

25. It is on the decrease, as shewn by the yearly consumption from the registered golas. This is due to increase of price and to some extent to smuggling from the Tributary Mahals.

26 and 27. I cannot say.

28. A moderate consumer takes about one-eighth of a tola a day. An habitual excessive consumer about a tola.

29. Dhatura is sometimes mixed with ganja to increase its effect. The seeds of the kuchila (nux vomica) are also mixed with ganja for the same purpose.

Bhang is also, when drunk, mixed with black pepper and other spices as cloves and mace and cinnamon, the object being to give an aromatic flavour.

30. The three drugs are chiefly consumed by males, and more by the old than by young men. As far as I can ascertain children never consume them.

31. The habit is easily formed and is difficult to break off. There is no tendency for the habit

* Was summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

to develop into excess other than would be the case in any other form of self-indulgence which the person permitted to become excessive.

32. During the Durga Puja, bhang is drunk on the night after the images have been thrown into the water, but not generally leading to excess. Siddhi made up into balls with molasses and ghee is also offered to Ganesh at his festival in the month of Bhadro, but the amount in each ball is very small and would not produce intoxication. I do not think these ceremonies would be likely to lead to the formation of a ganja habit, coming as they do at such long intervals.

33. The taking of ganja is looked down upon by the people, and held in disrepute on account of its effects. The habit of taking siddhi or bhang, however, is not looked down on, being more general and less harmful.

34. It would be a serious privation to habitual ganja consumers to forego its use. It is smoked by the poor as being a cheaper form of intoxication than liquor, and its effects more lasting. If deprived of it, they would therefore probably take to smoking the kuchila or dhatura seeds, which are both injurious.

35. I do not think it would be feasible as regards Orissa, owing to the facility for smuggling from the Tributary States. Its prohibition would also cause great discontent, as in Orissa the consumption of these drugs takes the place of alcohol. As stated in last question, its prohibition would probably lead to the consumption of other drugs equally or more injurious.

36. Not in Orissa.

37. I do not know.

38. Rajshahi ganja (round) is the strongest, but the nature of their effects is similar in different degrees, and stronger than that of the Gurjat ganja.

39. The smoking of ganja is said to be more injurious than drinking of siddhi or bhang, and for this reason the habit of taking ganja is more looked down on than the other.

40. Siddhi is used as a drug in the case of bowel-complaints by native doctors.

41. Siddhi is considered to be—

- (a) a digestive ;
- (b) it certainly gives staying power and alleviates fatigue, as shown in the case of paliki bearers ;
- (c) it is believed to be a febrifuge ;
- (d) is believed to be good for old people on account of its being digestive.

42. Siddhi in moderation would seem to be harmless, as the consumers of it are not prevented by it from doing their ordinary duties, nor are they looked down upon. As regards ganja smoking, I am not in a position to give a reliable opinion.

43. Yes.

44. Moderate.

Ganja-smoking is refreshing, does not produce complete intoxication, but after the effects are past does not allay hunger. However, in the case of fakirs, it must allay hunger, as they take very little food. The want of it produces longing and uneasiness.

45. The effect of these drugs varies, naturally, with the different constitutions of the consumers. The moderate use of siddhi, as noted above, is not

very injurious. The habit of ganja smoking certainly is.

I cannot say that the moderate use of these drugs tends to produce insanity, either temporary or permanent.

46. The habitual excessive use of ganja sometimes produces insanity. The act done by a person when under its intoxicating effects should not, however, be held to prove temporary insanity for the time, any more than the insane acts of a drunkard. In this asylum there are eighteen inmates ; of these three are reported as having been ganja smokers, but two of them deny the fact that they ever took ganja and express no desire for the drug. There is thus one admitted case out of eighteen.

47. It does not appear to be a hereditary habit, or to affect the children of the moderate consumer. Of course in a house where the father takes these drugs the sons when they grow up are more likely to take to it from example, than where the father is not a consumer.

48. The same answer as the last question.

49. It is said to produce a stimulating sexual effect on beginners, but not to have this effect after its use becomes habitual. Used in this way it is doubtless injurious as leading to excess of sexual indulgence and consequent injury to the constitution. It is so consumed by males only, and not by prostitutes. The moderate use of ganja is not said to produce impotence.

50. The same answer applies as to No. 49 in a greater degree. The excessive use of ganja is said to produce impotence, but it does not appear that the same result is caused by the excessive use of siddhi.

51. I am not aware of any proportion between the moderate use of these drugs and crime.

52. Their excessive use, no doubt, leads to crime by producing a violent form of intoxication, and by rendering the person for the time being not fully aware of the effects of what he is doing.

53. I do not know of any case.

54. I do not know of any such case.

55. I have occasionally heard of such cases. Probably some other narcotic drug was also added to strengthen the effect of the ganja or siddhi.

56. Hemp used in moderation is not generally mixed with other drugs. When used in excess, kuchila seeds or dhatura are sometimes mixed. Their effect is injurious. It intensifies the action of the ganja and prolongs its effects.

57. In Puri District, the Gurjat ganja is also drunk with milk, and sugar and spices. In this way it is much consumed by the "Pandas" attached to the Jagannath Temple. They are illiterate men, and mostly reported to be immoral, but their immorality is probably due to their being idle and overfed. Physically they do not suffer from taking ganja in this form.

58. The present system is working well. The consumption of ganja might be to some extent curtailed by raising its price.

59. If the duty on ganja were raised, and consequently its price, only to such a point as to induce consumers to reduce their average consumption, and not to deprive them entirely of it, the habit might be somewhat checked.

60. Ganja is not cultivated in Orissa. In the Tributary Mahals its cultivation is practically uncontrolled by the Rajas.

61. Charas not in use in Orissa.

62. Hemp is not grown in Orissa. I would not consider the restriction of its cultivation for the production of bhang in the Tributary States at present necessary, except that if the Rajas took its cultivation under State supervision, it would lead to less smuggling into British territory.

63. A law might be passed rendering the sale of any hemp drug to persons under a specified age penal; but, as stated before, the drugs are not much consumed by the young.

64. The present regulations for the importation of Rajshahi ganja are adequate, but the bales should be more securely packed and in stronger gunny to prevent any removal on the way. The rule for the importation of Gurjat ganja is that not less than eight maunds be imported at a time. This might be somewhat reduced to five maunds as importers are not always ready to buy eight maunds, and in this way the sale of Gurjat ganja would be encouraged, as compared with Rajshahi; and, as it is stated to be less harmful, this would be an advantage.

65. Ganja is for its price much more intoxicating than alcoholic liquor, and hence is the intoxicant of the poor. To make liquor so cheap that it would be able to take the place of ganja or siddhi in this respect would not be, in my opinion, desirable.

66. The present proportion between the rates appears good, as by them the more intoxicating form of the drug is the more highly taxed.

67 and 68. No.

69. Yes.

70. There is smuggling from the Tributary States on the borders of Orissa into the districts of Orissa. The only way to prevent this is to have a strong preventive or detective force. In the two districts of Orissa, with which I am acquainted, *viz.*, Puri and Cuttack, such cases have been much better detected in recent years owing to the inducement given to the police and others to detect them, by the liberal distribution of rewards on conviction.

28. Evidence of MR. H. R. H. COXE, Offg. Magistrate and Collector of Puri.

Oral evidence.

I have been over nine years in the service. I have been Collector of Puri only since the beginning of last December. I have been on tour for two months, about a fortnight of which was spent in Gurjat States, and the rest in the interior of this district. I was, while in the States, occupied specially with work connected with a recent rising and had no opportunity to investigate questions of general information. The only way in which ganja came to my notice then was that in the Rampur State, where I had grievances to investigate, one of the grievances alleged was that the Raja levied taxation on ganja. The people put up their grievances at great length, and mentioned everything that they possibly could against the administration. In respect to ganja they stated that they should have perfectly free trade in ganja and no taxation. My belief is that this was not a grievance that affected the people generally at all and that there was little of weight in it. But it was mentioned. The Raja taxes the vend; but I am not certain whether he interferes with cultivation. In comparison with other matters contained in the representation of the raiyats this was quite unimportant. I made no inquiries as to the extent of cultivation nor as to the traffic in the drug.

I think there is no part of the district in which ganja is not used. By "used" I mean smoked. Ganja is generally smoked, though it is also occasionally drunk. My impression is that the use of the drug is common all over the district. At the same time I think it is commoner along the roads. That is, I think, it is commoner with pilgrims than among the real inhabitants of the district. My impression is that Gurjat ganja is at least as popular as the Rajshahi ganja, perhaps more so. This impression is not based on careful inquiry, but it is based on what I have heard here as to the popular view of the drug throughout the district. Besides the Gurjat ganja is cheaper than the other. Yet it is of the Rajshahi that the most is issued. Thus, taking the last quarter's returns, we find that the issues of Rajshahi ganja amounted to 17

maunds and 32 seers and of Gurjat 11 maunds 13 seers. The consumption of licit Gurjat ganja has been steadily rising for the last three years as compared with the consumption of Rajshahi. But still it falls very far short. This leads me to have a strong impression that there has been much smuggling of Gurjat ganja. It is popular, yet it is not issued from the legal sources of supply, and the fact that the legitimate consumption is rising so rapidly would seem to show that the people have long used it, but that we are now only beginning to get the consumption of it under our control. This seems a logical conclusion.

I have before me also the settlement of the shops for next year. There are forty-three shops. Of this, only fourteen shops have taken Gurjat ganja at all during the current year. Of these, all but one or two are in the Sudder sub-division. The Khorda Sub-division has two thanas, *viz.*, Khorda and Bhanpur. Half of Khorda is surrounded by Native States, and Bhanpur is quite imbedded in the Native States. At the head-quarters of Khorda there is one shop, which takes on an average one seer and three chittacks a month. No other shop does. In Bhanpur there is only one shop, which takes two chittacks. All the rest of the Gurjat ganja goes to the Sudder sub-division. Most of it goes to Puri town and the shops on the high road. But the interior shops of the Sudder sub-division also take it. My conclusion is that the Khorda sub-division gets a very large portion of its supply by smuggling. It is obviously natural that the Khorda people would prefer Gurjat ganja, being of the same race as a large portion of the people of the Native States and being accustomed to it. The figures seem to bear this out. The average issues per mensem are:—

			M.	S.	C.
Gurjat	{	Khorda	.	0	1 5
		Sudder	.	1	28 1
Rajshahi	{	Khorda	.	0	27 1
		Sudder	.	6	4 8

I am convinced that the total of twenty-eight seers cannot represent anything like the monthly consumption in Khorda.

There are seizures of illicit ganja both in Khorda and in the Sudder sub-division. I cannot say at present how many cases come from each sub-division. The total number of prosecutions for possession of Gurjat ganja in the district for the nine months ending 31st December last was sixty-six. All of the Sudder cases come to me for sanctioning of the distribution of rewards, and I see many of the Khorda cases. My general impression is that the cases as a rule are *bond fide* cases. If this is so there must be a great deal of smuggling, because our detective agency is no stronger than anywhere else. All the cases I have seen are petty. The people most concerned in the Sudder sub-division are low class people, either consumers or servants carrying it for others. In Khorda it is generally the people themselves. Of course the drug is also found with pilgrims; but I think the prosecutions of pilgrims are less frequent. There is no search of pilgrims whether coming by sea or land. It would be monstrous to search pilgrims, to search the carts or bundles of pilgrims for Gurjat ganja. We do not search them either for excessive possession of ganja or for illicit Gurjat ganja when coming by routes through the States. Pilgrims by sea are very few. The seizures of ganja being petty would indicate that as a rule it is local consumers who bring it in, but I came across a case the other day in which the man was a professional smuggler. I cannot of course say how large a proportion of smugglers are prosecuted. I cannot say whether Mr. Taylor's estimate of one-twentieth is correct. But I am certain that sixty per cent. the estimate of the Deputy Collector, is preposterous. Ten or twenty per cent. would, I think, be a high estimate. As I have said, I am convinced that the consumption in Khorda is far in excess of the issues from legitimate sources of supply.

Gurjat ganja is sometimes used in drink; but so also is the Rajshahi ganja. I have been told by some natives elsewhere that they used Rajshahi ganja thus and been asked to partake. But the principal use of both, so far as I know, is smoking. I do not know which kind of ganja is stronger nor whether the one is more deleterious than the other. I have no experience here to enable me to

say whether a man who has acquired the habit of using the one will take easily to the other, or prefer what he is accustomed to.

I know nothing of the extent of the use of ganja in the Native States. I do not know about the use of liquor in Native States. The use of liquor there will, no doubt, be much the same among the Uriya raiyats as it is in Khorda. There the raiyats drink hardly at all. But perhaps the Khonds may be great drinkers. I have not had any opportunity of ascertaining their habits.

As our relations at present stand with the Native States it would be difficult to introduce any system into any part of their administration. For our present position in regard to them is to stand aloof and practically wash our hands of them. But if we were to enter into closer relations with them, I think there would be no difficulty in introducing any ganja system that might be necessary in prohibiting cultivation and otherwise restricting the drug. I think it would be easy, in respect to the three States connected with this district, *viz.*, Ranpur, Naiagarh, and Kanda-para.

My attention has not been drawn to smuggling from Madras. We border for a very short distance on Gumsur; but my attention has been directed chiefly to smuggling from our own Tributary States. I have no knowledge of the facts about any smuggling from that presidency. The Madras border is comparatively very small. I cannot give any satisfactory explanation of the slight increase in ganja consumption shown in the figures for 1892-93 as against the average for the preceding five years. I think that the withdrawal of the prohibition of cultivation in Native States within three miles of the border would not affect the matter. For the distance of three miles would be nothing in respect to the smuggling of ganja. Nor do I think the prohibition could be expected to be effectively enforced in our present relations with the States. As to the increase in duty I believe that increase in duty is not invariably accompanied with decrease in consumption, and I have shown that the increase in the use of licit Gurjat ganja has increased steadily since 1891-92.

29. Evidence of MR. J. H. BERNARD, Offg. Magistrate and Collector, Nadia.

1. The ordinary opportunities of a Bengal Civilian of 8½ years' standing.

2. Yes, each of the articles is locally known by the names mentioned in Dr. Prain's report.

3. In the District of Nadia. It is abundant in this district. I have seen it growing wild in Saran and Muzaffarpur districts.

4. Ganja—gol and chipta (round and flat) and chur. Siddhi, bhang, and charas.

I am not aware if at all these names refer to exactly the same plant.

5. A moist climate is beneficial to the growth of wild siddhi.

6. Ordinarily dense.

7. Not in this district.

8. No.

9. I do not believe it to be cultivated here.

10 and 11. See above.

13. (a) Yes.

(b), (c) To these questions I am not able to reply.

14. Not in this district.

15. See answer to question 14.

16. No bhang is sold by licensed vendors and is not prepared generally by the people. It can however be prepared from the wild hemp plant, but it is doubtful whether the people use it.

It is generally given to cattle suffering from disease.

17. See answer to question 14.

18. Ganja and bhang do deteriorate by keeping, and lose their effect after about six months. Dampness of soil and exposure to air cause deterioration. They are kept tied up in bundles of straw, then packed up in sacks which are again kept in tin-lined wooden boxes.

19. As far as I know, ganja and charas are used only for smoking. Siddhi or bhang are sometimes smoked.

20. Generally speaking the labouring class smoke ganja and charas. Some gentlemen also smoke them but they are few. I cannot give the proportion of smokers.

21. Chur is preferred for smoking in Kushtia sub-division and round ganja in the other sub-divisions of this district.

22. Foreign charas is chiefly used. It is imported from Calcutta.

23. Yes, but rarely. There is no particular locality where it is used. It is used instead of ganja.

24. No classes of people eat bhang. There are several who drink bhang. They are scattered all over the district and it is difficult to say the proportion.

25. Ganja—Slightly on the increase.

	Ganja.		Siddhi.		Charas.
	M. S. C.	M. S. C.	M. S. C.	M. S. C.	Nil.
1890-91	37-24-7		7-27-10		
1891-92	32-20-9	(5-3-14 decreased)	7-25-8	(0-2-2 decreased)	
1892-93	33-25-1	(6-5-8 increased)	7-36-0	(0-10-8 increased)	

26. (a) 3
(b) 1
(c) 5
(d) 1 } Out of every 10 consumers.

27. Generally from the lower class who work in the field or as coolies, bearers, and cart-drivers.

28. Ganja—

(a) $\frac{1}{4}$ th of a tola a day, costing 9 pies.

(b) $\frac{1}{4}$ th of a tola, costing 6 pies or $\frac{1}{2}$ anna a day.

Siddhi and charas I cannot say.

29. With ganja and charas tobacco is generally used, and with siddhi, pepper and other spices are used. Dhatura is occasionally used with siddhi to increase the intoxicating power. Yes, I have heard of such a thing as bhang massala, but I do not know its ingredients.

30. They are generally taken in company, and seldom used in solitude. Females take siddhi, but only males take siddhi, charas and ganja. Their use is not confined to any time of life. In youth, people learn to use them. Children do not use any of them.

31. Yes, and once contracted it is difficult to break off; especially in the case of those who smoke ganja.

Siddhi and charas can be easily given up. In the case of ganja there is a tendency to increase the dose.

32. On the Dasami day of Durga Puja every Hindu after evening drinks siddhi. Yes; this custom is an old one; has the sanction of religion. The use in this case is generally temperate and rarely excessive. No, it does not lead to the formation of a habit but it is injurious to those who drink much.

33. Ganja and charas consumption is regarded with dislike. Those who use them are ridiculed and laughed at. Those who take them are generally short tempered and are apt to do wrong when under their influence. I do not know of any custom of worshipping the plant.

34. I believe the consumers would suffer serious privation if compelled to forego the consumption of the drug. But this opinion is formed on what I have heard, and I am not able to say whether it is correct or to give details.

35. (a) No.

(b) Very likely.

(c) Only by a special inquisitorial establishment.

(d) Yes, I believe so.

(e) Probably not.

(f) The prohibition is almost certain to be followed by resort to alcoholic stimulants or other drugs.

36. No.

40. Not as far as I am aware. Siddhi is used for cattle disease.

41. (a) Moderate use promotes appetite.

(b) Gives staying power after severe exertion or exposure.

The lower classes of people use the drug for the above purposes. I refer to the moderate occasional and moderate habitual use.

42. I believe an adult is not harmed by smoking ganja provided he gets proper nourishment, because the moderate use of it increases the appetite and gives much relief after a hard work.

43. Sometimes they become offensive to their neighbours and others who visit them at the time they are under the influence of ganja.

44. No effect. It is probably refreshing only. Not intoxicating. To the rest of these questions I am not able to reply, except that it is said to create appetite.

45. Yes, it probably has a bad effect on the moral character. It does not impair the constitution. It does not injure digestion. It may cause any of these diseases. It impairs the moral sense and makes a man lazy and stupid. The moderate use does not produce insanity, I believe. I am not aware of any such cases.

46. It makes a man weak in physique and mind. It weakens the constitution. It produces loss of appetite. It causes chest disease. It impairs the moral sense and makes a man lazy. It produces insanity sometimes.

47 and 48. No.

49 and 50. I cannot say.

51. Most of the bad characters take ganja, either moderately or in excess.

53. Yes, probably. I know of no such case.

54 and 55. I cannot say.

56. Hemp taken moderately is not so harmful as that taken in excess. The effects I am told cannot be modified by the admixture of other substances.

57. I am not aware of this.

58. It is working well and capable of no improvement, as far as I am aware except great watchfulness.

60 and 61. It is not produced in this district, and I cannot give an opinion.

62 to 64. No.

65. Yes.

66. There are different rates of taxation for different kinds of ganja, as to which I have no criticism to offer.

67. No.

68. No such houses. They should not be licensed because it may tend to increased consumption.

69. No, it is not necessary.

70. No. There is no general use of untaxed drugs. In rare instances the Bairagis use the wild hemp for drink.

30. Evidence of MR. A. E. HARWARD, Offg. Magistrate and Collector, Bogra.

1. I have served in different districts of the province since 1885.

2. These definitions are correct. The names in common use here are bhang, siddhi, and charas.

Flat ganja=chipta ganja. Round ganja=gol ganja. Broken ganja=chur ganja.

3. The wild hemp plant occurs in most districts of Bengal. It grows abundantly in the western part of this district.

4. There are two varieties—

(1) The ordinary hemp plant as it is found wild, known as the bhang plant.

(2) The cultivated variety, from which ganja is obtained, known as the "ganja" plant.

Whether the two plants are specifically different, or whether the differences between them are the result of the careful cultivation of the ganja plant, is a question on which I am not competent to give an opinion.

5. The hemp plant grows best on light sandy soil, on high ground with moderate, but not excessive, rainfall.

6. Usually dense.

7. (a) It is cultivated for the production of ganja in the Adamdighi and Nawabganj thanas of this district, and in the adjoining portions of the Rajshahi and Dinajpur districts. The plant is not cultivated in this district for the purpose specified in (c) and (d).

(b) There is no regular cultivation of the plant in this district for use as bhang. The wild plant often grows spontaneously in the neighbourhood of houses, and such growth is sometimes protected and encouraged by householders for their own use, but there is no cultivation in the proper sense of the word.

8. The following figures show the area cultivated in this district only:—

Year.	Area in bighas.
1888-89	439
1889-90	384
1890-91	443
1891-92	127
1892-93	566

These figures have been obtained from Naogaon; the variations are attributed to the ordinary course of supply and demand.

9. The process of cultivation is described in the report of Babu Hem Chander Ker. I can add nothing of importance to his description.

10. They do not form a special class; they are Muhammadan cultivators in no way different to the bulk of the population of the district.

11. This is never done in this part of the country. I cannot say whether it is ever done elsewhere. Only the seed of the cultivated ganja plant is used.

12. I have never heard of the cultivation of wild hemp for the production of ganja.

13. The cultivation is confined to the tract mentioned in the reply to question No. 7. The selection of this tract appears to have been fortuitous.

A light sandy loam is most suitable for the growth of ganja. A heavy clayey soil is unsuitable. I believe that abundance of soil suitable for ganja cultivation could be found in many districts where no ganja is at present grown.

14. (a) Ganja is prepared in the tract where the ganja plant is grown.

(b) Charas is not prepared in the plains of Bengal.

(c) Bhang is prepared by people for their own consumption from the leaves of the wild plant.

15. Ganja is prepared from the cultivated plant in the manner described in the report of Babu Hem Chunder Ker. The ganja so prepared is used for smoking. I am informed that it is also occasionally used for eating; but this is rare.

Bhang in this district is prepared by the consumers in their own homes from the leaves of the wild plant. I am informed that the leaves are boiled in milk and then dried, and subsequently pounded, and from the pounded leaves an emulsion is made with milk and sugar. There are also other methods of preparing the drink, but I have not got accurate information about the details.

I am informed that ganja smokers sometimes smoke bhang leaves when they cannot get ganja, but this is exceptional.

16. Bhang is generally prepared by the consumers in their houses. In districts where bhang is sold the first stage of preparation of the leaves is carried out by the vendor, but the drink is always prepared by the consumers at home. In the plains of Bengal bhang can always be prepared from the hemp plant wherever found. Ganja and charas cannot be prepared from the wild plant.

17. There is no special class of men devoted to the preparation of these drugs here. Ganja is usually prepared either by the cultivators themselves with or without the assistance of hired labourers or by hired labourers employed by dealers who purchase the standing crop.

18. Ganja deteriorates by keeping. After two or three years it loses its effect completely. With ordinary care it will keep good for a year. Exposure to the atmosphere appears to be the cause of deterioration. It might perhaps be preserved longer if kept in air-tight cases, but I am not aware that the experiment has been tried.

19. Ganja is not used to any extent, except for smoking. Babu Fakir Chunder Chatterjee, Deputy Collector, informs me that in Behar many people put ganja in their mouths and suck it. And that in Lower Bengal some ganja smokers by way of bravado eat raw ganja, but these practices appear to be quite exceptional. Charas is only used for smoking. It is not used in this district.

20. The use of ganja is not confined to any particular class, but it is more common among the lower classes than among the upper. It is also more used by labourers, artisans, and menial servants than by the cultivating classes. Bairagies, sanyasis, and religious mendicants generally are specially addicted to the use of ganja. The up-country coolies who are continually passing

through this district also use the drug. I have written these remarks with special reference to this district, but they would also apply to most districts in Bengal.

Charas is not used here.

21. In this district flat ganja is most commonly used. But the tastes of different districts vary. The consumers like the form of the drug that they are most accustomed to.

22. Charas is not used here, and in no district of which I have had experience is there any large consumption of charas.

23. I am informed that ganja smokers, when they cannot get ganja, sometimes, smoke bhang, but this is rare. No instance of this practice has come within my personal observation.

24. (a) Bhang itself is not eaten. Majum, a preparation made from bhang, is eaten in some parts of the province, but it is not apparently used in this district, and I have no accurate information as to the classes who use it.

(b) The use of bhang as a drink is not confined to any particular class. It is more general among up-country men than among Bengalis. It is more common among Hindus than Muhammadans. Strict Muhammadans do not indulge in bhang.

25. The consumption of ganja which has paid duty shows a distinct tendency to decrease in this district, as will be seen from the following figures:—

Year	1888.	1889.	1890.	1891.	1892.
Consumption in maunds	64	54	51	52	42

There is, however, undoubtedly a certain amount of smuggling; and as this district includes a portion of the ganja growing tract, the vendors and consumers have greater opportunities for obtaining illicit ganja than they have elsewhere. It is, therefore, doubtful whether there has been any substantial decrease in consumption. It is impossible to obtain statistics regarding bhang, but I have no reason to suppose that the consumption is at the present time either increasing or decreasing to any notable extent, but I am informed that many years ago bhang was much more commonly used than at present.

26. It is very difficult to make even an approximate classification of this kind, because it is difficult to draw the line between moderation and excess, and also because it is impossible to obtain statistical information on the subject.

In the case of bhang, it may be said that of 100 drinkers 90 are occasional consumers, 8 are habitual moderate consumers, and 2 are habitual excessive consumers.

Of the occasional consumers and the habitual moderate consumers, some no doubt occasionally exceed the limits of moderation, but I cannot even pretend to make any estimate of their number.

In the case of ganja I should say that of 100 ganja smokers 50 are habitual moderate consumers, 30 are habitual consumers who occasionally exceed the limits of moderation, 15 are habitual excessive consumers, 5 are occasional consumers.

In making this estimate I include as habitual consumers those who habitually consume the drug when they can get it, but are from want of means frequently compelled to forego it. I do not count as consumers those persons who have tried the drug

once or twice, but who have never made a practice of consuming it either occasionally or habitually. Practically it may be said that all ganja smokers are habitual consumers so far as their means permit.

It must be understood that the figures which I have given above are mere estimates, and are not founded on any statistical information.

27. In the case of ganja, the habitual moderate consumers, and those who only occasionally exceed moderation, are mostly to be found among the labouring classes. They naturally feel a desire for some intoxicant after a day of hard work and exposure. Want of means, family ties, and regular occupation restrain them from habitual excess. Habitual excessive consumers are mostly to be found among religious mendicants and among the scum of the populace in towns and bazars who have no regular occupation or social ties to restrain them. The habitual consumption of ganja by religious mendicants is to be accounted for partly by custom and partly by the life of constant exposure which many of them lead.

In the case of bhang, occasional and habitual consumers are drawn from all classes.

28. (a) The habitual moderate ganja smoker consumes about $\frac{1}{4}$ th tola, costing half anna.

(b) The habitual excessive ganja smoker consumes about half tola, costing 2 annas.

(a) The habitual moderate bhang drinker uses half to one tola of dried leaves.

(b) The habitual excessive bhang drinker consumes 4 or 5 tolas of dried leaves.

As the wild bhang grows in this district and is not sold here, the cost to the consumer cannot be stated. I must add that the above figures can only be regarded as approximate. The quantity consumed by different individuals differs very much, and it is difficult to draw the line between moderate and excessive consumption.

29. Tobacco is ordinarily mixed with ganja. No other ingredient is ever used.

In preparing bhang, milk and sugar are ordinarily used, and rose water and other flavouring matters exceptionally. I am not aware that any intoxicating or injurious ingredient is ever used with bhang.

I have never heard of dhatura being voluntarily used with either bhang or ganja. I have heard of dhatura being mixed with ganja by professional poisoners for the purpose of drugging their victims.

I have not heard of any preparation such as "bhang massala" being sold.

30. Both bhang and ganja are ordinarily consumed in company, but confirmed ganja smokers also consume it in solitude. Prostitutes use these drugs, but otherwise the consumption is almost entirely confined to the male sex. It is not usual for children to consume these drugs.

31. The habit of drinking bhang is easily formed, and is also, I believe, easily broken off.

The habit of ganja-smoking is less easily formed, as the effects are, I believe, unpleasant to a novice. A confirmed ganja smoker would probably require some resolution and strength of mind to break off the habit so long as he had the means of getting ganja, but I am informed that

the cessation of the habit does not cause any of the intense craving, uneasiness, and actual illness caused by the cessation of the opium habit. In the case of bhang there does not appear to be any strong tendency for the moderate habit to develop into the excessive. In the case of ganja, a great deal depends on the circumstances of the consumers. Men of fixed occupation, who get no opportunity or temptation to indulge till late at night, usually remain moderate consumers all their lives; but in the case of men of no fixed employment (especially religious mendicants), there is a marked tendency for the moderate habit to develop into the excessive.

32. It is a social custom among Hindus to drink bhang on the last day of the Durga Puja. The drink is offered to every guest and every member of the household. The use of the drug does not appear to be regarded as in any way essential; it is apparently merely a sign of hospitality. The consumption is usually moderate; indeed, it is often a mere form. It is not likely to lead to the formation of the habit.

33. Among the upper classes the occasional use of bhang is tolerated, but the habitual or excessive use is considered disreputable. Among the upper classes the use of ganja is considered disreputable. Among the respectable cultivating classes (including in that term Hindus of higher castes and the ordinary Muhammadan cultivators of this part of the province), the use of ganja is rare, and such few ganja smokers as there are, are generally regarded as rather shady characters. But among the low caste Hindus and among the labouring classes generally the ganja smoker is not thought any worse than his fellows.

There is no custom of worshipping the hemp plant on any occasion. But ganja usually forms part of the offerings made at certain shrines of Siva.

34. It would undoubtedly cause discontent among habitual ganja smokers if they were deprived of their ganja, but I cannot say that it would be any serious privation to them.

35. It would be absolutely impossible to prevent the use of bhang. Any attempt to do so would produce no effect, except the harassment of innocent people and the enrichment of underlings in the police and excise departments. The only way in which the use of ganja could be prevented would be by entirely cutting off the supply. It would be perfectly possible to put a stop to the cultivation of the ganja plant in this and the adjoining districts, and to prevent the cultivation of the plant on any considerable scale in this province. If, however, ganja continued to be produced elsewhere, it would certainly be smuggled into Bengal, and it would be impossible to prevent such smuggling. I have no information as to whether the production of ganja is or could be carried on on any considerable scale in Nepal or any other Native State; but the possibility of such production should be carefully considered before any measure of prohibition is resorted to. So long as illicit ganja could be obtained, the prohibition of the production here would do more harm than good. The prohibition of cultivation would cause some loss to the cultivators, but would not deprive them of their means of livelihood, as they could grow other crops. The wholesale dealers would suffer more seriously, but their number is small.

Prohibition would cause considerable discontent among habitual consumers, but such discontent

would not in Bengal amount to a political danger. I cannot speak for other provinces. I regard it as certain that, in event of effectual prohibition of the production of ganja, the majority of persons who now consume ganja would spend on other stimulants the whole of the money which they now spend on ganja. The up-country labouring classes and low caste men generally prefer spirits to ganja, and only resort to ganja because it is cheaper.

36. I do not find any evidence of any such change in this district.

37. I have no experience of the effects of charas smoking.

38. There is no difference in kind in the effects. In this district, where flat ganja is consumed, it is generally reputed that round ganja is stronger; but I do not believe that there is really any great difference in their effects between these two kinds, or between them and chur.

39. Drinking bhang is less injurious than smoking ganja.

I have seen many men who have ruined their constitution by excessive ganja smoking, but I have never myself come across any one who had suffered to any serious extent from drinking bhang.

40. Ganja and bhang are both made use of by kabirajes.

Bhang is frequently used in the treatment of cattle diseases.

41. (a) Both ganja and bhang are said to cause a temporary increase of appetite, but their use in this direction can hardly be said to be beneficial.

(b) Ganja undoubtedly has the effect of alleviating fatigue. Bhang also has, I believe, the same effect; they are both reputed to give staying power under severe exertion.

It is a fact that a large proportion of ganja smokers are found among those classes of labourers (such as palki-bearers) whose work involves severe exertion, and these men often display remarkable staying power, but whether the ganja gives them the staying power I cannot say. Such men are generally habitual moderate consumers.

42. The occasional moderate use of bhang appears to be absolutely harmless. The habitual moderate use of bhang does not appear to cause any noticeable ill effect. The occasional use of ganja causes unpleasant effects at the time, and is therefore rare.

The habitual moderate use of ganja does not appear to cause any noticeable injurious effects in men who lead an active life. I do not think that the use of ganja can be said to be entirely harmless under any circumstances.

43. I have never heard of any case in which a moderate consumer made himself actively offensive to his neighbours. Even moderate consumers are regarded with a certain amount of disgust by their more respectable neighbours, but they never tend to become violent, nor indeed do they interfere with their neighbours in any way.

44. Bhang consumed in moderation by an habitual consumer produces slight intoxication and hilarity; it creates appetite for the time being. Its effects last for ten or twelve hours.

The effects of ganja are much more rapid. It produces immediate giddiness and intoxication. Its effects last four or five hours.

The after effects of both drugs are headache and giddiness, but with the habitual consumer the after effects of moderate indulgence are not noticeable.

In the case of ganja, the want of subsequent gratification produces some longing for the drug, but not nearly to the same extent as in the case of opium.

45. I am not aware that the use of bhang in moderation produces any noticeable noxious effect.

The habitual use of ganja even in moderation appears to have a tendency to impair the constitution, but in what precise way I cannot say. A good deal seems to depend on the habits and mode of life of the consumers. In the case of men who lead an active open air life, the moderate consumption does not appear as a rule to produce any perceptible effect, but such ganja smokers as I have met with among men leading sedentary lives have always been unhealthy-looking objects.

Ganja does tend to impair the moral sense and induce habits of laziness and debauchery, but in the case of moderate consumers, who lead an otherwise healthy and regular life, these effects do not as a rule become very marked.

Ganja probably tends to deaden the intellect, but I have never heard of any case in which the habitual and moderate consumption of the drug caused insanity. There may be such cases. I have met with many cases of insanity attributed to ganja smoking, but in such cases the subjects could not have been termed moderate consumers in any reasonable sense of the word. I have had no such case before me here, and have no notes of cases I have seen elsewhere, and therefore cannot give any precise details. There is one point which should be remembered, and that is that nearly all religious mendicants are ganja smokers. Many of them are men who have adopted this mode of life because they are not quite as sane as their fellows. Cases of insanity among these men should not be too readily attributed to ganja.

46. The habitual excessive use of ganja does impair the constitution and moral sense, and does cause insanity. A prolonged debauch causes an acute form of temporary madness, and long continued excessive use of the drug causes general dulling of the faculties and imbecility.

47 and 48. I have never heard of any such effect.

49. I have heard of such use, but have no accurate information on the subject.

51 and 52. Bad characters may roughly be divided into the following classes:—

1st.—Hereditary criminals, *i.e.*, members of a criminal tribe or of a tribe or caste having strong criminal tendencies.—These men usually follow the custom of their tribe or caste in the matter of the consumption of these drugs. In some of these castes the habit of ganja smoking is common; others are addicted to bhang. Others are not addicted to either drug.

Their tendency to crime is the result of hereditary disposition and education, and is in no way connected with the consumption of these drugs.

2nd.—Men of low and disreputable origin, such as are common in towns, who, having no

social ties, often become criminals.—Men of this class usually take to intoxicants in some form, and some of them become habitual ganja smokers, and when they do so they are prone to indulge in the habit to excess, but it cannot be said that the consumption of the drug has any special connection with crime.

It may be that some men of this class who might otherwise earn an honest livelihood are prevented from doing so by their partiality for the drug, but in most cases I think men of this class are criminals first, and ganja smokers afterwards.

3rd.—Men who are to all outward appearance respectable members of society, who league themselves with criminals, and commit or abet crime for the purpose of gain.—Men of this class do not usually consume these drugs.

4th.—Individual members of respectable families, who have been outcasted or who have cast off social ties and taken to crime.—Such men are often ganja smokers, but they usually adopt the habit, after they have commenced to associate with criminals and disreputable characters. The habit is generally the effect and not the cause of their fall.

My experience is that the consumption of these drugs is not connected with crime in general or with any particular class of crime. Sometimes it may happen that habitual ganja smokers when hard up commit theft to supply their wants, but such cases are comparatively rare. I do not believe that the interdiction of ganja would appreciably diminish crime.

53. No. In the case of ganja the immediate effect is stupefying. There is none of that tendency to violence which is a characteristic of alcoholic intoxication. When, however, excessive indulgence causes actual mania, then violent conduct may be expected. I cannot, however, call to mind any particular case of homicidal frenzy, though I think I have heard of such cases.

54. I know of no authentic case of this. I remember one case in which a murderer was stated to have smoked ganja before committing the crime. There was, however, a woman in the case and the real facts were never ascertained.

55. Such cases do occur but they are not very common. Complete stupefaction can be caused by ganja alone. In cases of drugging by professional criminals, it is usual to find dhatura used.

56. Tobacco is commonly mixed with ganja; it merely moderates the effect. I am not aware that other substances are mixed with ganja.

I have not heard of dhatura being mixed with ganja for personal consumption, but I have heard of it being used in the manner by professional poisoners. Dhatura is a powerful and dangerous narcotic poison. It produces complete stupefaction, which lasts for a considerable time. It often causes death.

57. I have heard of ganja being eaten, but the practice is rare. I have no information regarding the effects.

58. I consider that the present system works fairly well.

59. I do not advocate any radical change.

60. The defect of the existing system is that by a no means inconsiderable quantity of ganja escapes payment of duty. It is very difficult to form any estimate of the amount so smuggled,

but the fact that, in spite of all difficulties in the way of detection, cases are from time to time detected in almost all parts of the province shows that the amount must be considerable. I believe that this smuggling could be reduced within very small limits if ganja were made a Government monopoly. The cultivators would then have the certainty of selling their whole crop promptly and at reasonable rates, and this would remove the principal temptation which they have at present to dispose of their ganja to illicit dealers. I doubt whether any measure short of this would effectually check smuggling.

61. Charas is not produced here.

62. In no district in which I have served is the hemp plant cultivated to any appreciable extent for the production of bhang. The plant often grows spontaneously on high land in the neighbourhood of houses, and no doubt householders sometimes protect such plants and encourage their growth for their own use; but there is no profit to be made by cultivating the plant on a large scale for the simple reason that the wild plant is so abundant. Any attempt to prevent cultivation such as I have described would do more harm than good. It would be ineffectual, and would expose innocent men on whose homesteads a few plants might be found to tyranny and extortion. Under the existing law the cultivation of the plant for the production of bhang without a license is forbidden under section 5 of the Excise Act. I would keep this provision in order to retain the power of preventing cultivation on any considerable scale should such be attempted, but I would make no attempt to enforce the provision in cases of the casual cultivation of a few plants such as I have described above.

63. I have no objection to the present system.

64. No.

65. I have no alteration to suggest.

66. It is necessary that there should be different rates for the different kinds of ganja for the reason that the different kinds as sold wholesale contain different proportions of the drug actually consumed.

Flat ganja contains a considerable proportion of useless wood.

Round ganja contains less wood, and chur less still.

67. No.

68. There are in this district licensed shops for the sale of ganja. There is no prohibition of consumption on the premises, but the drug is not as a matter of fact usually consumed on the premises. The consumers merely purchase what they require, and take it away with them.

69. No special measures are taken to ascertain the wishes of the people, nor is there any necessity for such measures, as the consumers are the only people who have any wishes about the matter. I have never heard of a ganja shop becoming in any way a nuisance to any neighbourhood.

70. I have no information regarding smuggling from Native States. In the case of ganja, there is no doubt that an appreciable quantity of the drug does escape duty. I doubt whether this smuggling could be materially diminished by any measure short of establishing a Government monopoly. In the case of bhang the greater part of the consumption is untaxed, and I see no practicable means of enforcing the payment of duty on this drug.

31. Evidence of COLONEL C. H. GARBETT, Deputy Commissioner of Hazaribagh.

1. Babu Basanto Krisna Bose, as Excise Officer since September 1892, and Rai Jadu Nath Mukerji as one who has given attention to the subject since a long time.

2. Yes. Siddhi is known here as "siddhi" or "sabji," "Charas" as charas. Flat ganja is called "chipta," round ganja "gol," and broken ganja "chur."

3. Nowhere in this Division.

7. No.

14. No.

18. Ganja deteriorates by keeping. It retains its properties for about two years from date of its preparation if kept with ordinary care. Dryage of the resinous substance is the cause of deterioration. No means are known here to prevent deterioration. Regarding charas nothing is known, as it is not used in this district. Siddhi is a little more durable than ganja. In the case of ganja people prefer to have fresh ganja, while in the case of siddhi they prefer stuff two or three years old. Siddhi also deteriorates by dryage and consequent breakage.

19. In this district charas is not used at all; and ganja is used only for smoking.

20. Ganja is not used by the Muhammadans, of the district, except those of them who form the fakir (beggar) class. Of the Hindus the lower classes do not use it, while it is very commonly used by the middle and well-to-do classes. This remark applies to the whole of the district. Ganja is not extensively used in this district.

The proportion of ganja-smokers to the entire population does not probably exceed one in a thousand.

21. Flat ganja is preferred here.

22. None.

23. It is sometimes used for smoking when ganja is unavailable. Its use is not confined to any particular locality or to any particular class.

24. The eating of bhang is not resorted to by any particular class. It is eaten only on particular occasions with particular preparations. The common use of the drug is in the shape of drink.

The drug is used by the middle and the upper classes of the people, and the proportion of bhang consumers to the whole population is estimated to be about one in two thousand.

25. Neither.

26. As regards ganja the generality of the consumers fall under head (a). Classes (b), (c) and (d) are rare. As regards siddhi, (a) habitual moderate consumers are about 75 per cent., class (b) is nil, class (c) is 25 per cent., and class (d) is nil.

27. Ganja consumers consist of the well-to-do petty land holders or cultivators, all of whom have extensive cultivations. Exposure in the rainy months to the inclemencies of the weather is generally the cause which make them resort to the practice.

As regards siddhi, the consumers become addicted to it for the sake of its narcotic effect, and

it is preferred by the upper classes because its moderate use is not looked down upon by society.

28. (a) In case of ganja, $\frac{1}{4}$ of a tola per head per diem, at a cost of one anna. In case of siddhi, $\frac{1}{16}$ of a tola per diem, at a cost of three pie.

29. Dry tobacco leaf is ordinarily mixed with ganja; in exceptional cases, prepared tobacco is mixed in addition. By "prepared tobacco" is meant tobacco leaves pounded and mixed with treacle to the consistence of paste. Dry leaf is mixed in order to reduce the ganja to the consistency required for smoking. Prepared tobacco is used in order to make it sweet.

Bhang massala is ordinarily mixed with bhang, and in exceptional cases sweetmeats. (Dhatūra is not used with either of these drugs.) Bhang massala is used in order to make the stuff tasty. The exceptional admixture of sweets makes it a luxury and at the same time stronger in its effects. A preparation known as bhang massala is sold by the Banias (country druggists) in packets containing—

- (1) Souf (aniseed).
- (2) Cucumber seed.
- (3) Golmirich (black-pepper).
- (4) Chhota elaichi (cardamom).
- (5) Kasni.

30. Ganja is used both in solitude and in company and siddhi is generally used in solitude. It is mainly confined to the male sex, but not to any time of life. It is not usual for children to consume any of these drugs.

31. The habit is easily formed. To break it off is not difficult in the case of bhang, but very difficult in the case of ganja. There is a tendency to increase in the consumption of ganja, but not so in the case of bhang.

32. There is no custom, social or religious, in regard to the use of ganja on any occasion, but in the case of bhang there is a custom among the Hindus to use it on the last day of the Durga Puja. The use is, however, not essential, and it is always temperately used. It is not injurious, nor does such use lead to the formation of a habit. The custom is that, after consigning the image into the waters on the tenth day of the moon of the month of Assin, people assemble in the house where the Puja took place and there they salute and embrace each other and drink a little bhang and take a little sweetmeat.

33. The consumption of ganja is generally regarded with dislike, while that of bhang is not taken notice of at all. There is a social public opinion against the use of ganja, but not so in the case of bhang. The use of ganja brings one into disrepute, as it is considered to be productive of bad effects both as regards the body and the mind. There is no custom of worshipping the plant in this district.

34. It would be in the case of ganja, but not in the case of bhang. The sudden deprivation of ganja to a habitual smoker for a couple of days or so would affect the physical powers. The probable number in this district who would suffer by the privation is perhaps a thousand.

35. Feasible in the case of bhang, but not in the case of ganja. There are no means of getting ganja illicitly in this district, but the result would be that the habitual smokers would take to the use of dhatūra, which practice they resort to even now, when they cannot procure ganja for a number of days. It would be very easy to enforce the

prohibition in this district by stopping the import which is under the control of Government. The prohibition would certainly cause discontent among the consumers, but not to the extent of making it a political danger. Such prohibition would be followed by recourse to alcoholic stimulants and other drugs.

36. Alcohol is not taken in the place of ganja and bhang in this district.

37. There is a difference, but particulars are not known, as charas is not used in this district.

38. Not so far as is here known.

39. No experience in the matter.

40. Yes, ganja and bhang are used for medicinal purposes by the kabirajes, but not charas. Bhang is used for the treatment of cattle.

41. (a) We do not know that ganja and charas are beneficial on this head, but bhang is.

(b) Yes (for all the three).

(c) Ganja is used as a preventive of malarial diseases.

(d) The use of ganja is considered by devotees particularly to help in the concentration of minds.

Cultivators in marshy tracts use it for purposes referred to in clause (c). Postal runners and other people who have constantly to go long distances use it for the (b) property, and professional fakirs use it for properties mentioned above under clause (d). The proportion is, we think, cent. per cent. We refer both to moderate and occasional use of the drug.

42. We consider the moderate use of charas and bhang to be harmless, as we have never come across any consumers who have been injuriously affected.

43. Yes.

44. The immediate effect of the moderate use of these drugs is refreshing. It does produce intoxication; it does not allay hunger; it creates appetite; the effect lasts two or three hours in case of ganja and charas and about six hours in the case of bhang. There are after-effects in case of bhang only. Want of subsequent gratification produces longing and uneasiness.

45. Habitual moderate use of ganja does produce noxious effects. It impairs the constitution, but it does not injure appetite. It causes dysentery, bronchitis, and asthma in some cases, but it does not impair the moral sense. It produces insanity in some cases. In case of temporary insanity symptoms may be reinduced by use of the drug after liberation from restraint.

46. Habitual excessive use of every one of these drugs (though to a less extent in the case of charas) produces all the bad effects referred to in question 45.

47 and 48. No.

49 and 50. We don't know.

51 and 52. No. We believe there is no such connection.

53. Excessive indulgence in ganja produces anger, and may thereby induce unpremeditated violence. It is said that it produces temporary homicidal frenzy.

54 and 55. No.

56. By admixture of some of the substances the intoxicating power of the drugs is increased, while

others lessen the feeling of heat in the brain after intoxication has disappeared. The use of dhatura as an admixture produces all the bad effects mentioned before.

57. We have never known this.

58. The present system is working well in this district and we have no suggestion to offer for its improvement.

63 and 64. No.

65. Yes.

66. Yes, because of the difference in the quantity of toxic materials in each kind.

67 and 68. No.

69. Not in this district. The number of shops necessary for this district and the quantity of consumption are so small that public opinion in the present backward conditions of the district need not be taken into consideration.

70. There is no importation of any of the drugs from Native States into this district. So far as this district is concerned duty is really paid in respect to the drugs used, and there is no general use of untaxed drugs at all.

32. Evidence of Mr. C. A. S. BEDFORD,* Deputy Commissioner of Manbhum.

2. Charas is the name applied to the resinous matter which forms the active principle of the plant when collected separately.

Ganja consists of the dried flowering tops of the cultivated female hemp plants, which have become coated with resin.

Siddhi and Bhang.—These are not ordinarily obtained from the ganja plants, but they consist of the dry leaves of a different variety of the hemp plant, which does not produce the resinous matter called "Charas," and the flowering tops of which are not used as ganja.

Ganja leaves may be and are often mixed with the siddhi and bhang to make them stronger in action, but ordinarily they are comparatively mild in their effects. This is my information.

There are three different kinds of ganja: the "flat," which is not commonly used, "round ganja" and the "chur," or broken ganja. The two latter are commonly used in this district.

3. Bhang plants grow indigenously in many districts, mostly in Behar districts. Ganja plants do not to any greater extent grow wild. They grow or rather are grown largely in Murshidabad, Rajshahi and Singhbhum.

5. Generally speaking, the ganja plant does well in a moist alluvial tract of country, the same with bhang plants growing spontaneously.

6. Generally the growth of the wild hemp is scattered and not dense, a few plants growing here and there about the homestead lands.

7. Not in Chota Nagpur, as far as I know. In Rajshahi ganja is cultivated.

8. Not known.

9. I believe generally in the same manner as tobacco is cultivated, but I am unable to give any reliable information.

10. There is no cultivation in this district, but in Rajshahi some classes of Hindus and Muhammadans cultivate ganja together with other crops, but under supervision of Government officials; but cultivation is not confined to any special class.

11. No, not as far as I can ascertain.

12. No.

13. Restricted to the Rajshahi district, where the conditions of cultivation are eminently favourable.

14. Ganja, charas and bhang are imported into this district (Manbhum), but not produced or prepared here.

15. I have no personal knowledge.

16. Bhang is not ordinarily prepared by the people in their own houses. It has generally to be bought. But it can be obtained from the hemp plant (uncultivated) wherever it grows. But ganja and charas cannot, I believe, be prepared.

17. Cannot say.

18. Ganja, which is principally used in this district, is prepared in Rajshahi in Phalgun and Chait (February and March) and imported into this district. Generally keeps well for a year or two and then deteriorates and loses its potency. Exposure to damp injures it, and after three or four years it nearly loses all its effects, so that the consumers won't buy such old and useless stuff. It is therefore necessary to keep it well packed in bags and in closed boxes.

19. Ganja and charas are both used for smoking. Charas is smoked in tobacco. Ganja is also smoked, mixed with tobacco or by itself. Ganja is occasionally chewed like tobacco, and is now and then used like "siddhi" as a drink.

20. Charas is used by rich folks only; ganja by the lower classes of the community. Any one who can afford to pay half a pice can use it, as about 4 grains are procurable for such sum.

21. "Round" only. Chur is very rarely, if ever, used here.

22. Usually native. I believe the wealthier classes occasionally go in for charas smuggled in from Nepal.

23. Occasionally by beginners. Cannot say in what localities, by what classes of the people and to what extent.

24. Bhang is generally used as a drink, occasionally chewed; largely used by up-country men.

25. There is reason to believe that the consumption of ganja has increased to a considerable extent of late years.

Figures for Manbhum District.

	Ganja.			Bhang.		
	M.	S.	Ch.	M.	S.	Ch.
1890-91	38	14	6	0	38	12
1891-92	43	19	9	1	23	10
1892-93	43	18	6	1	35	8
26.	Ganja.			Bhang.		
(a)	60 per cent.			90 per cent.		
(b)	20	"		2	"	
(c)	15	"		6	"	
(d)	5	"		2	"	

* Was summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

27. Ganja and bhang—

(a) Fakirs, Sanyasis, up-country men or darwans, athletes, etc. (b) Brahmans who worship Kali, palki-bearers, porters, labourers, etc. (c) Young people prone to gaiety. (d) Those among the latter class who have no control over themselves.

28. For habitual moderate consumers, $\frac{1}{4}$ tola, worth about 6 pice. For habitual excessive consumers, $\frac{1}{2}$ tola and above.

29. Tobacco is used with ganja when smoked or chewed. Dhatura is not mixed with ganja ordinarily. In preparing siddhi or bhang drink, sometimes black pepper, cucumber seeds and treacle or sugar are mixed.

30. As a rule these drugs are used, I believe, in company. The habit is mainly confined to the male sex, but a small proportion of females also use ganja. As a rule, the children do not acquire the habit. It is impossible to say to what extent the consumption is practised in solitude.

31. The habit is easily formed and is difficult to break off, as there is a decided tendency for the moderate habit to develop into the excessive.

32. On the fourth day of the Durga Puja, after the Bejaya ceremony is over, the practice amongst the Hindus is to drink "siddhi," one and all, men, women and children, but always well diluted, and generally in moderate quantities. At Deoghar those who go to the shrine of Baidyanath drink "siddhi as Prasad."

33. The habitual use of any of these drugs cannot be said to be regarded with favour; rather it should be said such a habit is regarded with disfavour by the upper classes. There is no custom of worshipping the hemp plant by any classes of the people in Manbhum that I know of.

34. I believe it would be some privation to the lower classes, who generally consume ganja, to forego its use altogether, when such people are doing hard work as palki-bearers and coolies; the occasional use of a bit of the leaf gives them a fresh stimulus to exertion.

35. The use of charas, I believe, can be prohibited without any ill consequences. The use of ganja can be prohibited, but it is very likely that it will be used illicitly. But the price may be raised, so that the quantity consumed can be checked, and excessive quantities will not be used. I do not think the prohibition will cause any serious discontent, which is likely to create a political danger, but it is likely that some of the consumers will take to opium or alcoholic drinks instead. The prohibition will undoubtedly give rise to irritation, and will be regarded as another prick of the goad. The fussy interference we have indulged in of late years and this perpetual goading is certain to end in disaster. The patient ox is bound to turn some day.

36. Formerly elderly persons of the respectable class, who were ignorant of the English language and of English civilization, used to indulge in opium and charas. But the advance of English education led to an appreciation of alcoholic liquors, particularly imported liquors, and drinking became a fashionable vice. With the increase in the population and in the spread of English education the number of those who are addicted to alcoholic drinks has steadily increased. But I believe that though the number of habitual consumers of alcohol is greater than formerly, the number of drunkards, that is, of immoderate

drinkers, is proportionately smaller. The habit of smoking ganja and of drinking country spirits is almost wholly confined to the lower classes of the people (Dr. Basu, Civil Surgeon, is my authority for the above).

37 to 39. I do not know.

40. Kabirajes use the drug (Bejaya bhang) for sleeplessness, loss of appetite, indigestion, chronic diarrhoea, dyspepsia and also for the purpose of exciting the passions. The powder of the dried leaves is given and also compound preparations, such as *jotiphalodya churna*, *Ivanerala rasa*, *kameshwar modak*, *beleya sukra soner modak*, etc.

41. (a) Not as food accessory, but as a digestive.

(b) To give staying power under severe exertion and to alleviate fatigue.

(c) I do not think it has any antimalarial effect.

42. Moderate occasional use is beneficial; so I am informed by the Civil Surgeon.

43. As a rule the moderate consumers are inoffensive to their neighbours, but it cannot be said, however, that the habit does not produce remote evil consequences in those who indulge in it.

44. Very small quantities chewed with tobacco seem to produce refreshing effects. Smoking generally brings on intoxication, talkativeness, excitement of the brain and nervous system, irritability, anger (violence) followed by exhaustion and sleepiness. If sleep is produced, it is calm and refreshing, and appetite is sharpened. It is generally not followed by the same feeling of nervous prostration, as is observed after the abuse of alcoholic drinks.

45. Yes, from persistent use the system is impaired, followed by loss of appetite, sometimes by dysentery. Mental faculties become weakened from habitual use, perception dulled, and laziness and indolence induced. Passions and appetites are excited, leading to immorality and debauchery; sense of responsibility is impaired, and certain forms of insanity are induced.

Of insanity.—Acute mania followed by the chronic form. If the habit can be given up soon, then there may be a cure, otherwise the disease takes a chronic but intractable form. In many such cases there is a religious tendency—"a certain god or goddess has issued orders to do this, and that," and so forth. In those who were in the habit of smoking ganja, before becoming insane, there may be a tendency to further indulgence in the use of such drugs. (From information received from Dr. Basu.)

46. Habitual excessive use generally affects the brain and nervous system more directly, and impairs the mental faculties and moral sense. (Information supplied by Dr. Basu.)

47 and 48. Cannot say.

49. Yes, siddhi, bhang and ganja are used as aphrodisiacs, and such use is remotely followed by impotence. I cannot give any reliable information as to whether these drugs are used as aphrodisiacs by prostitutes. If information on this point is really required, I would suggest a reference to the two ladies who perambulated the bazaars of India last cold weather and who subsequently fell foul of Lord Roberts in connection with C. D. matters. Ample details will, no doubt, be forthcoming.

51. Petty thefts are committed by those who have been long addicted to the use of ganja, and whose intellectual faculties and moral sense are impaired. Violent crimes are also committed by those under the influence of the drug.

52. In the acute stage riotings and murders occur.

53. Yes. I know of no such case.

54. From what I can learn, I should certainly say yes.

55. There is reason to believe so. But in such cases generally dhatura and opium are used in addition.

56. Ganja smoked without tobacco leaves is irritating to the throat, producing violent coughing. Bhang used with black pepper has a cooling effect. Nothing special.

57. Ganja eaten does not produce intoxication so rapidly as when smoked.

58. The system under which ganja and bhang are supplied to the consumers has been known to cause no inconvenience to the public, and is believed to be working well. In view, however,

of the increasing consumption of ganja, there ought to be further check in the shape of enhanced duty.

59. See above.

60. No cultivation in Manbhum.

63 and 64. No objection.

65. There is no great disparity in the rates of taxation upon ganja and bhang. But supposing that one pice worth of ganja gives as much intoxication as four pice worth of country liquor and two pice worth of opium, I should say that there is ample room for improvement in the taxation of ganja.

66. There should be different rates of taxation for different kinds of ganja, according to the amount of intoxication that a particular kind of ganja is supposed to induce.

67. None: only this, that with a view to check further increase of ganja consumption, rates of duty should be further enhanced.

68. None in this district.

69. Yes.

33. Evidence of Mr. R. H. BENNY, Deputy Commissioner of Singhbhum.

2. These definitions may be accepted. Such are the names by which their products are known to me.

3. None.

4 to 6. See above.

7 to 9. I believe so, but not in my district.

10 and 11. Don't know.

12. I have no knowledge on this subject.

13. Yes; to Rajshahi, Bogra, and Dinajpur districts. Cannot say why. I have no knowledge as to conditions of climate, soil, etc., nor am I able to say if there are any parts of this (Bengal) province where its cultivation would be impossible. From cases which have come up before me for trial in both Chota Nagpur and Behar, I find that it is possible to grow the plant in these divisions, but I am unable to say whether or no this can be done on an extensive scale or not. In the cases referred to, only a plant or two were detected.

14. In this province (Bengal), yes. In my district no, so far as I know.

15. I have no knowledge on these subjects.

16. Bhang not in this district. Ganja, I know, can be prepared from the wild plant. I have come across cases in which people have been prosecuted for so preparing it. I have no information in regard to charas.

17. I don't know, as they are not made in this district.

18. Yes, it deteriorates by keeping; it loses its effect in time. It remains good for a year with ordinary care. Moisture and dampness are the causes of deterioration. To prevent deterioration it should be kept in a tin-lined box placed in well ventilated rooms.

19. Ganja and charas are generally used for smoking, but the former is occasionally used for medical purposes. Ganja boiled in cocoanut-oil becomes a medicine for itch, and is used in almost all the districts of Bengal.

20. Fakirs and sadhus, Bengalis, Uriyas, Beharis, Muhammadans, Tamarias, Uraons, and Bhuians smoke ganja. About 5 per cent. of the population of these classes smoke ganja. In this district ganja is used at Chaibassa, Baharagorah, Ghatsilla, Chakradharpur, and Manaharpur, and all over the district. Charas is not in use in this district.

21. Round ganja is preferred. The other kinds are not used here.

22. See concluding portion of answer to question No. 20.

23. No.

24. Bhang is both eaten and drunk by Bengalis and Beharis in summer season only. At least 10 per cent. of these two classes use it. There is no particular locality, but this is done in places where these people live.

25. On the decrease, as prices of all principal food-grains are ruling high.

26. In this district there are habitual moderate consumers of ganja and bhang only. Their proportions are respectively 5 and 10 per cent.

27. About classes of people, I have already answered in questions Nos. 20 and 24. As far as this district is concerned, the use of ganja and charas is not due to any particular habits of life or circumstances.

29. Tobacco leaves are ordinarily mixed with ganja and dhatura is mixed with bhang only. These admixtures are intended to increase intoxication. The ingredients mixed with bhang are anise, a species of parsley, and cardamom. They are known by the name of bhang massala.

30. As regards first part of the question I have no knowledge. Ganja and bhang are partaken of by both males and females. Children do not consume any of these drugs.

31. Yes, the habit is easily formed in respect of ganja and charas. Yes, difficult to break off. Yes, there is a tendency for the moderate habit to develop into the excessive.

32. At times of the annual worship of Kali, Durga, Sib and other divinities, ganja and bhang in this district are used. The use of these drugs on these occasions is excessive. I cannot answer the rest of the question.

33. The consumption is regarded with disfavour by public opinion, as it is supposed to affect the mental faculties, to impair the constitution, and to shorten life. I do not know of any custom of worshipping the hemp plant. No such custom prevails here.

34. I cannot answer this question.

36 to 38. No knowledge.

39. Smoking is said to be less injurious than either drinking or eating. I cannot say why.

41. Beneficial only to those addicted to it.

43. Yes.

44. I am told that it is refreshing, produces intoxication, allays hunger, and creates appetite. Its effects last about eight hours or so, and the want of subsequent gratification produces longing as well as uneasiness.

58. Yes, I am acquainted with the system of excise administration. I consider the system capable of improvement.

59. As regards cultivation, storage and transport, I would like to see it put in the same footing as opium. Its cultivation should be supervised by a superior agency, as is done in the case of opium: there should be a factory for its storage and packing, and indents for supplies to districts should be made in a similar way as is done in the case of opium.

60 and 61. I cannot say. I have no experience.

62. I consider that it should be treated in the way proposed in my answer to question 59.

63. I have objections. I would like to see the golas abolished and sales made to retail vendors from the Government treasury, exactly in a similar manner as is done in the case of opium. One good result of the proposed system would be that we could exercise control over the price at which the drug is sold to the consumers and could prevent its being sold too cheap.

64. See answers to questions 59 and 63.

65. In this district the taxation is fair with reference to alcoholic and other intoxicants; but the taxation is, generally speaking, low in all cases. Year by year, however, it is being raised slowly and gradually.

66. In this district only round ganja is imported, so I am unable to offer an opinion.

67. The taxation is very low at present; the consumer can afford to pay much more. The lowness of the taxation is mainly due to the present defective method of taxing. See answer to questions 59 and 63.

68. There are houses or shops licensed for the sale of these drugs or their preparations, and there is no prohibition to there being consumers in the premises. As no inconvenience has been brought to light as resulting from the present method, I would not interfere.

69. Up to date the wishes of the people have not been consulted; and as no complaints have been preferred, I suppose no cause for any exists. If the public did object, their objection should undoubtedly receive full consideration.

70. I have good reason to believe, in regard to this district, that a good deal of hemp drugs, but in very small quantities only, are smuggled into it from the Native States, which hem it in on all sides. All these drugs, so smuggled, are untaxed.

34. Evidence of RAI NANDAKISORE DAS, BAHADUR,* District Officer of Angul, Cuttack.

1. During the last fifteen years, while travelling in the Orissa Tributary Mahals, I have had frequent opportunities of watching the growth of the plant, and here and in the British Districts I have seen their use.

2. Yes, but the method of manufacturing ganja here given applies to Rajshahi ganja, and not Gurjat ganja. In the Tributary Mahals of Orissa (Gurjats) the plants are not trodden under foot, but young plants and their branches are several times twisted at the interval of every two or three days, until the plants are mature and have grown to the height of four or five feet.

3. Throughout the Gurjat; but it is only where the plant has once grown, that the plant grows spontaneously in succeeding years. It does not grow wild anywhere.

4. It is known as the ganja plant and by no other name.

5. The plant germinates at the beginning of the rains, and it grows only in manured rich soil; but there is no wild hemp properly so called.

6. Such as grow here, their growth is scattered; but they do not grow wild in the Gurjats.

7. As stated above, the plant is grown in well-manured land, generally homestead. In all parts of the country, a few plants may be seen growing

here and there; but there is no regular cultivation to any large extent, and I have nowhere seen more than twenty plants growing at one and the same place. Generally four or five plants are to be seen at a place. These are cultivated chiefly for bhang and to a small extent for ganja. Charas is not manufactured.

8. No.

9. The plant grows of itself if there are seeds of the previous year in the ground; otherwise a few seeds are sown, and nothing more than the twisting of the stem for the production of ganja is done; they are watered when necessary.

10. No; they are all of the agricultural class.

11. There is no such thing as wild hemp here; it is only where ganja has once been cultivated that the plant germinates of itself and often produces ganja.

12. I know nothing of wild hemp.

13. No. No restriction. It is common to all States. No special condition of climate, etc., necessary, except that the soil must be rich. It will not grow in gravelly, concrete, or sandy soil. I do not think that in any part of the Tributary Mahals its cultivation is impossible.

14. Ganja and bhang are prepared in all parts of the country; but nowhere land is specially set

* Was summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

apart for its cultivation, a few plants being grown here and there.

15. The stem and branches of the plant being twisted, the female plants produce ganja. When the tree is ripe and the leaves assume an yellowish color, the plants are cut, tied into bundles, or rolled in a mat or gunny bag, and then placed under heavy weight for two or three days. Then it is taken out, exposed to dews, leaves and seeds are shaken off, and then it is dried and tied into bundles and stored. This makes flat ganja. The leaves are collected, dried, and kept for use as bhang.

16. Bhang is prepared generally by the people in their houses. It can be prepared from the hemp plant wherever it is grown. There is no wild ganja here.

17. There is no special class.

18. Ganja is said to keep well for a year or two. Bhang for two or three years; then it gradually deteriorates. But I do not know of these having been kept for a longer period and with what effect.

19. No charas used in the Gurjats. Ganja is used only for smoking.

20. The use of ganja is not confined to any particular class or locality. Bairagis almost invariably use ganja. No one uses charas. The proportion of people who smoke ganja is not more than 2 per cent., and is perhaps less.

21. Flat ganja locally manufactured is used. No other kind of ganja is manufactured or imported.

22. None.

23. No.

24. Not confined to any class or locality.

25. Normal.

26. As stated above, the total percentage of consumers is small, and amongst them the proportion of habitual, occasional or excessive consumers is much smaller.

27. Mendicant Bairagis, to be occasionally seen here and there, are excessive consumers. Labouring classes are occasional moderate consumers. They use it after exposure or hard labour.

28. (a) One pice.

(b) One pice to four pice.

29. Tobacco leaves are mixed with ganja, because the smokers say that ganja alone cannot be smoked. Black pepper is ordinarily mixed with bhang, and occasionally mace, cardamom, cloves, and other spices, as well as milk and sugar, are mixed with it.

30. Ganja is generally used in company. Bhang is generally used in solitude.

31. No. Not easily formed. It is not difficult to break off a habit, at least is not so difficult as opium eating or smoking is. One can do without ganja or bhang if not available. There is a tendency for the moderate habit to develop into excessive, both in ganja and bhang, if habitually used.

32. There is no such custom.

33. Bhang-drinking is treated rather with indifference. Habitual ganja-smoking, except in the case of Bairagis, is regarded with abhorrence.

34. No. To none; but the excessive consumers may be temporarily in discomfort.

35. It will be feasible to prohibit the use of both bhang and ganja. The prohibition can be enforced only by prohibiting the cultivation of ganja (provided, of course, the Native Chiefs of all the surrounding States co-operate) and its import. There will be no serious discontent, and it is to be feared that some of the consumers might resort to the use of the more pernicious drug—opium.

36. No.

37. I know nothing of it.

38. Here we have only one kind of ganja, and that is flat ganja.

39. Smoking ganja is considered more injurious than bhang drinking or eating.

40. Bhang is prescribed. It is not used for cattle disease.

41. I know nothing of charas. Both ganja and bhang are digestive. Ganja is believed to give staying-power. In malarious tracts ganja is considered as febrifuge. Bhang is considered a tonic and aphrodisiac. Agricultural labourers use ganja on account of its staying-power. They are occasional moderate smokers.

42. I cannot say.

43. Yes.

44. Ganja is refreshing. It does produce intoxication. It does not allay hunger. Bhang creates appetite, and so does ganja.

45 and 46. I cannot say.

47 and 48. No.

49. Yes. Bhang is so considered as aphrodisiac. It is not used by prostitutes.

50. I cannot say.

51 and 52. No. Not here.

53. I do not think so.

54. No.

55. Nothing of the sort is known here.

56. Dhatura is not used in these parts. The admixture of pepper with bhang and of tobacco with ganja is considered essential, and pepper and other spices mixed with bhang are considered to have the effect of cooling.

57. No. Not here.

58 to 60. There is at present no control over local manufacture or consumption of ganja or bhang.

61. Not produced.

62. So far as the Tributary Mahals are concerned, I do not think any interference is necessary.

63. There is no such system here.

64. There is no import. As to export, officers of the districts into which Gurjat ganja and bhang is imported are in better position to answer the question.

65. There is no taxation.

66 and 67. There is only flat ganja here, and it is not used.

68. None.

69. No shops.

70. No.

35. *Evidence of MR. W. MAXWELL, Sub-Divisional Officer, Jhenidah, District Jessore.*

1. The opportunities afforded by my official position. The consumption of ganja in this sub-division is comparatively small. The information contained in the following answers has been mainly gained from :—

E. G. Macleod, Esq., Kotechandpur, F. G. Gibson, Esq., Purabat, Babu Ram Dayal Ghose, Hospital Assistant, Babu Sashtibar Bhattacharjya, Medical Practitioner, Babu Moti Lal Gupta, Hospital Assistant, Babu Taranna Prasanna Ghose, Gentleman, Officers of Police and two syces who smoke ganja.

3. It is not grown here.

4. Siddhi, bhang, charas, and ganja.

5. It is said to grow in moist and shady places. 7 and 8. No.

11. Not cultivated here.

14. None prepared in this sub-division.

16. Yes; it is drunk or eaten in balls. Occasionally it is smoked.

18. They deteriorate by being kept a long time exposed. Ganja is sometimes kept for several months in Government ganja golas without any appreciable deterioration.

19. Charas is used very little here. Ganja and charas are used for smoking only.

20. Syces, coolies, boatmen, ticca gariwalas, and sanyasis are the classes who use ganja most. There are a few cases of persons of a better class using ganja. Charas is used very little here.

21. Chur is principally used. It has greater active power.

22. It is imported from Rajshahi.

23. It appears to be used here only when the supply of ganja runs short.

24. Sanyasis habitually drink bhang. Well-to-do classes drink bhang with milk in time of pujas.

26. Most of the consumers come under heading (a). A few are habitual excessive consumers.

27. Persons who work hard physically or lead a life of exposure are the principal consumers. It is supposed to protect from exposure.

28. (a) 1 to 3 pice worth.

(b) 3 to 6 pice worth.

29. (a) Tobacco, to diminish the effect. (b) Dhatura could be used to make the consumer unconscious for criminal purposes.

30. It is generally practised in company. It is confined to the male sex and to prostitutes. Children never use these drugs.

31. The habit is easily formed. It is difficult to break off. There appears to be a slight tendency for the moderate habit to develop into the excessive.

32. During the Charak Sankranti puja, ganja is offered to the followers of Siva. The use of the drug is not regarded as essential. It is temperate. It is not likely to lead to the formation of the habit. Sanyasis habitually use the drugs.

33. The consumption of these drugs is regarded with disapproval. 'Ganjakhor' is a term of reproach. There is no religious objection to their use.

34. To those who now use these drugs it would be a serious privation. The result to some of the consumers of breaking off the habit might be very injurious to their health.

35. It could not be consumed illicitly here to much extent. There would be some discontent among the present consumers, but the discontent would not amount to a political danger. The prohibition will probably be followed by recourse to alcoholic stimulants or other drugs. Opium would likely replace it to some extent.

36. The quantity of ganja sold here in 1892-93 was 10 maunds 25 seers; the quantity sold in 1887-88 was 13 maunds 7 seers; that sold in 1888-89 was 15 maunds 6½ seers. Since 1888-89 the quantity sold is almost stationary. Charas and siddhi are not sold here. Alcohol is not being substituted for ganja to any appreciable extent here.

Since the abolition of the outstill system here, the quantity of liquor sold here has not varied to any great extent. The quantity sold tends to become less. It does not therefore appear to me that the use of alcohol is supplanting that of ganja.

37. Charas makes one drowsy. Ganja has a tendency to excite.

38. No perceptible difference.

40. Bhang and ganja are prescribed for chronic dysentery. Ganja pills are given to old people for impotency.

41. Native practitioners told me that—

(a) they cause an appetite;

(b) they are used under these circumstances with good effect;

(c) they are not so used here;

(d) ganja is used for impotency.

The moderate habitual use is referred to. Coolies, syces, boatmen, and ticca garhi drivers are the classes who use the drugs for these purposes.

42. The use of ganja is comparatively, not absolutely, harmless. It makes the consumer nervous when he happens to be deprived of it for a time. There is always a danger of the moderate developing into the excessive use.

43. They are inoffensive unless annoyed. When roused they are more dangerous than non-consumers.

44. It is refreshing after fatigue. Ganja produces intoxication at once. It does not allay hunger. It creates an appetite. The effect lasts about a couple of hours. Irritableness appears to be an after-effect. The want of subsequent gratification produces longing in the habitual consumer.

45. (b) Not appreciably.

(c) No.

(d) No.

(e) By exciting it perhaps slightly impairs the moral sense.

(f) No such case known here.

46. Habitual excessive use impairs the constitution eventually. I have only heard of one case of insanity produced by it. A native practitioner, Sashtibar Bhattacharjya, of Kotechandpur, told me of it, but he could not give particulars. He himself had only heard of the case.

47. The use is not hereditary. The children are not directly affected.

49. Ganja is so used by prostitutes. This use is more injurious than as a narcotic, because in this way the consumer uses the drug to excess. The habitually excessive use is said to produce impotence.

50. Answered in question No. 49.

51. Crime cannot be attributed to the use of any of these drugs here.

52. A ganja consumer when under the influence of the drug may be more easily provoked to personal violence than non-consumers in general.

53 and 54, No.

55. Ganja and dhatura may be used. The only cases in which these are now used are in theft cases. The commonest type is that of theft of ornaments from prostitutes.

56. Tobacco lessens the effect.

57. They are not eaten or drunk here, as far as I can ascertain.

58. It is working satisfactorily here.

59. The duty should be sufficiently great to prevent the consumption of these drugs increasing. The duty has been increased on ganja since 1st January 1894.

69. Enquiry is held by the Sub-Divisional Officer as to the wishes of the inhabitants of any place before opening a shop there.

36. *Evidence of MR. W. C. TAYLOR, Special Deputy Collector, Land Acquisition, East Coast Railway, and Pensioned Deputy Magistrate and Deputy Collector, Khurda, Orissa.*

1. About 47 years' residence in India, including 33 years as Assistant Commissioner, Deputy Magistrate, etc., spent chiefly in the maffassal, where I was in charge of sub-divisions with management of Abkari or Excise matters. Since 1866 I have been in Orissa, but my personal knowledge of the subject is very limited, and most of my answers to the questions have been compiled from replies to enquiries from natives of the district who have some knowledge.

2. Dr. Prain's names and definitions are correct and are used in Orissa. Charas is not much used in Orissa.

The formation of seed does not appear to be prevented entirely in the preparation or rather growth of the plant, as most ganja contains fertile seeds which germinate freely.

The names flat or chipta ganja, round or gol ganja, and broken or bhanga ganja are all used in Orissa. There are no other names.

3. I am not aware of the hemp plant being indigenous in Bengal, Behar, or Orissa, but the plant grows freely from seed everywhere on suitable soil.

4. Ganja or ganjai. The Uriya ganja and Telegu ganjai; both names refer to the same plant. There is, I believe, doubt as to the two species, *Cannabis sativa* and *Cannabis Indica*, being really distinct.

5. No special conditions, excepting rich light soil, with sufficient moisture, appear to be necessary.

The plant is indigenous in the hills of Northern India, and grows freely, producing flowers and seeds all over India, and, I believe, Asia.

6. I have never seen wild hemp growing.

7. (a) Yes; in the Tributary States of Orissa and in Ganjam, and Gumsar in Madras.

(b) No.

(c) Yes. Ditto ditto.

(d) No.

I cannot give the extent of cultivation in the Tributary Mahals. The plant is usually grown in the gardens or near the homesteads of the raiyats, but in more or less small plots. No duty is charged on the plant or its products in the Tributary States and in Madras, which presidency

adjoins Orissa, ganja is not an exciseable article. All the hill tribes, such as Khonds, Santias, etc., grow and consume ganja and bhang as a preventive of malarious fevers.

8. There has of late years been some decrease in the area under cultivation in the Orissa Tributary States owing to pressure put on the Chiefs to forbid cultivation near the boundaries of the regulation districts of Puri, Cuttack, and Balasore. A few years ago I recollect that the Madras authorities refused to check the cultivation of hemp in Gumsar on the grounds that the Khonds required ganja and bhang as a safeguard against malarial fevers. A considerable amount of what is called Gurjat ganja and patti are smuggled into Cuttack, Puri, and Balasore.

9. The hemp plant is usually cultivated in small plots of light rich soil, on the plants getting well up, they are hoed and weeded, roots loosened, and vegetable mould or well rotted cowdung applied as manure.

10. All classes and castes will cultivate the hemp plant. The cultivation, where permitted, is not confined to any particular class. In the course of my service I have often found a few plants of hemp growing in the gardens of Brahmins and other high caste natives. Unless these plants are found and pulled up by the police, they are invariably used for preparation of ganja and bhang.

11. I do not know.

12. I know nothing of the so-called wild hemp. In the hemp grown in Orissa and Ganjam the male plants are not, I believe, extirpated.

13. The cultivation of the hemp plant for ganja is not permitted in the regulation parts of Orissa. In the Non-regulation parts or Tributary States the cultivation is permitted by the Chiefs of those States, but in States which lapse to Government, or which come under Government management, cultivation of hemp is not, I believe, allowed. In the adjoining district of Ganjam in Madras, I believe that there are no restrictions on the cultivation of the plant or the preparation of its products, ganja not being, I believe, an exciseable article in Madras.

14. Flat ganja is prepared in the Tributary States. Charas is not prepared. Bhang is prepared all over Orissa. I cannot give the extent,

but it must be very considerable. Gurjat ganja is admitted on payment of a lower duty than Rajshahi round ganja. Patti is also admitted. A good deal of ganja is also smuggled into the three regulation districts of the province from the Gurjats and Madras.

15. The hemp heads are cut on the seeds ripening in November. The heads are tied in small bundles and sprinkled with lime-water, and then alternately buried and exposed to the sun for two or three months, when the ganja is fit for use. In the Tributary States of Barambu and Narsinghpur ganja is not buried, but is first dried in small bundles and then pressed.

The flower heads only are used for smoking and called "kali ganja." The leaves, when dry, are steeped or boiled in water or milk; the water or milk in which they are steeped or boiled is thrown away, and the leaves ground up with black pepper and spices, such as cloves and cardamoms, mixed with water, sometimes sweetened, and made into a drink called bhang. Prepared by first boiling in milk the bhang is said to be cooling (thanda), but if boiled in water it is said to retain its heating (garam) or intoxicating properties.

16. (a) and (b) Yes.

(c) I have never seen the wild plant.

17. All classes.

18. Ganja, if not well kept, gets mouldy and loses flavour, but it is said to get stronger by keeping. Bhang will not keep. I know nothing of charas. Damp, fermentation and insects are the main causes of deterioration of ganja. The ganja should be kept in a very dry and airy place and occasionally exposed to the sun. It will keep good with care for two or three years.

19. Ganja is used only for smoking, except in rare cases, when some persons mix a little ganja with their bhang. I know nothing of charas. Ganja is also used in medicine.

20. All classes smoke ganja all over Orissa. Charas is not used in Orissa.

21. The Rajshahi or round ganja is preferred for smoking by regular consumers as being stronger than the local Gurjat flat ganja. Chur is not different; it is merely the flowers detached from their stalks, and before it can be smoked all ganja becomes obur or broken, as with tea and broken tea; the articles are not really different.

22. No charas is imported into Orissa, so far as I am aware.

23. No.

24. All classes. Can't give proportion, probably as high as 20 per cent. of the males and 5 per cent. of the females. About 100 per cent. of priests and attendants of temples and of Vishnu-wite ascetics take bhang.

25. The use of ganja is said to be on the increase; also of bhang. Can't give reasons, except that the existence of so many ganja shops must have a tendency to attract consumers and increase the consumption.

26. No data to go upon.

27. All classes. I can't say what in each case are the habits of life or other circumstances which lead to the habit of smoking ganja or taking bhang.

28. (a) From pies 3 to 6.

(b). From annas 2 to 8 or more.

29. For smoking, tobacco is usually mixed with ganja. Dhatura seeds are sometimes mixed with bhang, especially by ascetics, to make the mixture extremely intoxicating.

Bhang massala is sold in the bazars, and is usually made up of black pepper, cardamoms, nutmeg, cinnamon, allspice, anise, carraway, poppy seeds, and flowers of the nageswar (*Messna ferrea*).

30. Ganja and bhang are consumed both in company and in private, and the consumption of ganja is mainly confined to the male sex. Women occasionally take bhang as a cooling and digestive draught. It is not usual for children to take either ganja or bhang except when prescribed medicinally.

31. The habit is easily formed and difficult to break off suddenly. There is a great tendency for moderate consumers to develop into excessive consumers both of ganja and bhang.

32. I do not know of any.

33. The smoking of ganja is looked upon with disfavour as bad for the health and pocket and as leading to crime. No worship of the hemp plant is known in Orissa. The taking of bhang in moderation is not so injurious as the smoking of ganja, and is not so much objected to. The word "gaujari," smoker of ganja, is used as a term of abuse.

34. Regular smokers of ganja and takers of bhang would, of course, feel it as a serious privation to forego the consumption of the drugs. I can give no figures.

35. As the hemp plant can only be cultivated openly, and as ganja and "patti" are bulky products, there would be no great difficulty in forbidding production or preventing smuggling. The task would be easier than in the case of salt. Consumers would no doubt be seriously discontented, and would probably revert to some other form of drug. I do not think that the discontent would amount to any serious political danger.

36. No.

37. Charas smoking is not practised in this province.

38. Rajshahi or round ganja is stronger and more intoxicating and more heating than Gurjat or flat ganja. Chur may be of either sort, and, as being the actual flowers and buds, is stronger than round or flat ganja.

39. Smoking ganja is notoriously more injurious than drinking bhang. I allude to the regular habit and not to occasional use.

40. All native physicians use hemp in the preparation of mudak, carminative digestive tonics. The use of ganja, etc., does not appear to be known here in the treatment of cattle diseases.

41. (a) Yes.

(b) Yes.

(c) Yes.

(d) Also as a sedative.

All classes. I cannot give any figures, and I only refer to the very moderate use of these drugs.

42. Included in 41.

43. They are usually inoffensive.

44. Refreshing and sedative, not visibly intoxicating. It is said to allay hunger for the time, but after the effects have worn off, say in one or two hours, the appetite is said to be improved.

After-effects unknown, but the want of subsequent gratification at the usual hour is said to produce longing and uneasiness.

45. (b) and (c) Said not to do so.

(d) and (e) Dysentery, bronchitis, and asthma from excessive use, and even the moderate use is said to give a tendency to these diseases. Habits of immorality are said to be induced.

(f) The moderate use of hemp drugs is not thought to produce insanity. I cannot answer this part of the question.

46. The habitual excessive use of these drugs is well known to cause insanity, dysentery, asthma, bronchitis, dropsy, general debility, and great nerve deterioration. In fact, excessive ganja-smoking is generally thought to be more injurious than the excessive use of any other intoxicating drug or alcohol. From the well known fact that religious ascetics and mendicants are usually strong and robust, it is probable that good and sufficient food counteracts the evil *physical* effects of ganja and bhang, for this class are notoriously excessive consumers of hemp drugs, but they live on the fat of the land. They are, however, generally more or less insane.

47. No data.

48. No data, but, as with drunkenness, the excessive use of hemp drugs probably is to some extent hereditary; and as the parent's general health and strength and moral character are seriously impaired, his offspring must be injuriously affected.

49 and 50. The hemp drugs are, I believe, used as aphrodisiacs. Excessive use is said to produce impotence.

51. Yes; bad characters are usually ganja-smokers and takers of bhang. I cannot say what connection the moderate use of these drugs has with crime.

52. Same as 51, but to greater extent.

53 and 54. The numerous cases of what is called running "amok" which occur in India are often, if not always, due to excessive doses of ganja and bhang taken with or without admixture of dhatura seeds (*Datura stramonium*). The word assassin is derived from hashishin or hashish inebriate, and hashish is a preparation of charas.

55. I believe that the records of criminal trials in India will shew that many such cases occur. I don't know whether complete stupefaction can be induced by ganja or bhang unmixed with other drugs.

56. I cannot say further than this that the admixture of dhatura renders the drug more violently intoxicating and causes great excitement, amounting occasionally to homicidal frenzy.

57. I have no experience on the subject of the question.

58 and 59. I have not had any acquaintance with excise administration since 1889.

60. There is, so far as I am aware, no restriction on the cultivation of the hemp plant either in the Tributary States of Orissa or in the adjoining district of Ganjam in Madras. The manufacture of ganja and the preparation of bhang are entirely uncontrolled. I am not prepared to make any remarks on the system.

61. Charas is not produced.

62. One or two plants of hemp in a raiyat's garden would produce leaves sufficient to supply him with bhang, and it would not, I think, be possible to control this.

63. I have no recent experience.

64. I do not know sufficient of the subject to enable me to answer this question.

65. I have no recent knowledge of the subject excepting that the present rates in this part of the country are—

	Rs.	A.	P.	
Charas ganja . . .	6	8	0	} For the im- ported or Raj- shahi ganja.
Round . . .	0	0	0	
Flat . . .	4	8	0	
Gurjat (flat) . . .	8	0	0	} Grown lo- cally.
Siddhi or patti . . .	0	0	0	

Even at the low rate of Rs. 3-8-0 very little Gurjat ganja pays duty, although a great deal must be consumed.

66. I do not think that there is any need for different rates of duty on round or flat Bengal ganja. Charas should pay a higher rate, as presumably a stronger and more elegant preparation. The rates on Gurjat ganja must at first be lower, but they can be raised gradually as the cultivation and smuggling is controlled.

67. I have not.

68. The licenses are for sale of the drugs only and not for consumption on the premises.

69. Not that I am aware of. Local opinion should, I think, be taken and considered.

70. A considerable amount of flat ganja and "patti" is smuggled into Orissa from the neighbouring States and Madras, chiefly in small parcels. When brought in on passes granted by the Excise Officers, Gurjat ganja has to pay about half the tax levied on Rajshahi ganja. Details of the amount of Gurjat and Rajshahi ganja imported and of the duty paid respectively can be obtained from the Collector. It is notorious, however, that large quantities of untaxed ganja and bhang are used in all the regulation districts of Orissa, but no figures are available.

Oral evidence.

Question 1.—I have served in Nadia, Mymensingh, the Sonthal Farganas, and then came to Orissa. I have visited the Tributary States of Nayagarh, Khandpura, and Ranpur, the States bordering on Khurda, sometimes on visits to the Rajas, sometimes shikaring, and sometimes settling boundaries. My duties required me to be pretty constantly on tour throughout the year.

Question 6.—I am speaking of hemp that is really wild, not of that which is self-sown near villages. I have never seen wild hemp, though I have spent a good deal of time in the jungles.

Question 10.—When I was in charge of subdivisions, the police occasionally sent up men on the charge of growing hemp. I have never heard of any particular annoyance to the villagers on this account, though the offenders complained of the hardship of being harassed on account of their having allowed one or two plants of hemp to grow in their compounds. There are men who make part of their living out of the rewards to be got in excise prosecution, and they go about enquiring and sometimes make up false cases. The liability to have their houses searched gives people far greater annoyance than the prohibition to cultivate does. As far as I know, the putting up of plants is a trifling matter.

Question 15.—I have recently learnt from enquiry in the Gujrats that burying is a part of the process of manufacture. The plants are buried for a week at a time without anything to protect

them from contact with the earth, and the process of alternate burying and exposure goes on for two and three months.

Question 21.—I do not remember to have heard about the heating quality of the Gurjat ganja. The information on which my answer is based was given to me by consumers and vendors.

Question 25.—My opinion as to the increase of ganja consumption is formed on information given to me by natives with whom I am constantly conversing on all subjects. My knowledge relates specially to Khurda, which is a sub-division of the Puri District.

Question 35.—Dhatura is a drug which might be used in place of ganja. I do not remember any other drug, but alcohol might of course to some extent take the place of hemp. I have no experience of dhatura being smoked, except medicinally, but I know it is used by Vaishnavite ascetics to increase the intoxicating effect of bhang. Shaivite ascetics have the same habit.

Question 46.—I have in some cases seen people emaciated and anæmic, and their friends attributed their condition to the habit of excessive smoking of ganja. I have also seen people insane, whose insanity was attributed to the excessive use of bhang or ganja. I made no special enquiry into any of these cases. I merely accepted the statements made to me.

Questions 53 and 54.—My answer is based on general report and some experience of my own. Once when passing through a village in the Sonthal Parganas with friends, a man attacked us with a sword and cut off a piece of one of my companion's boots. He was seized before he could do more mischief. We learnt afterwards that the man was drunk with bhang. That occurred during the Sonthal rebellion in 1856. The villagers

and the man himself said he was intoxicated with bhang. I do not recall any other case within my personal observation, but I have read of such cases in the newspapers. I know also that the word assassin is derived from *hashish*, which is said to be prepared from charas.

Question 70.—I am persuaded of the prevalence of smuggling of ganja by the facts that many cases were brought to my notice, and that the frontier of Orissa marches for hundreds of miles with the Gurjat States and the Madras Presidency, where the drug is grown. Large quantities used to be imported under the name of patti, and I pointed out to the authorities that the stuff was really ganja, but no notice was taken of my representation. I have read what Mr. Metcalfe said regarding the smuggling of Gurjat ganja in his No. 204-E., dated 9th June 1887. I thoroughly believe that the smuggling of ganja is very extensive, much more so even than is stated in this letter. The Commissioner would find it useful to get returns of the quantity of Gurjat ganja seized and destroyed, though the number of cases detected is not one-twentieth of the whole. The smuggling takes place from the Madras Presidency as well as the Gurjat States, about equally from both sources, in proportion to the length of boundary. I include the ganja from Madras in all I have said about Gurjat ganja. I fancy there is much more ganja produced in the Gurjat states than they have use for. I have seen small patches as big as a quarter bigha of homestead cultivation myself. I believe the cultivation is unrestricted in Gumsar over the border in the Madras Presidency, though I have never seen it there myself. The whole frontier against the Gurjats and Madras, except a very small opening on the latter border, is forest. I saw the patches of cultivation between 1876 and 1880. I could not have mistaken anything else for the hemp plant.

37. Evidence of CHUNDER NARAIN SINGH, Kayasth, Deputy Collector, at present employed as Personal Assistant to the Commissioner of the Bhagalpur Division.

1. I was for many years employed as Excise Deputy Collector at Bhagalpur and elsewhere.

2. I think these definitions are fairly accurate, and may be accepted. I do not, however, speak from actual experience of the process of preparation, having never served or been in a producing district. My knowledge is derived from books, as well as from constant experience of the imported ganja when in charge of the Excise Department.

3. My knowledge does not extend to the cultivation of the hemp plant, I therefore leave this chapter blank.

14. My knowledge does not extend to the preparation or manufacture of the drugs, I therefore leave this chapter blank.

19. So far as I am aware, ganja and charas are almost exclusively used for smoking. I say "almost," because I have occasionally seen ganja used externally mixed with oil for the cure of skin diseases, such as itches.

20. I am not familiar with the use of charas. Its use was almost known in the districts to which my experience extended when I was in charge of the Excise Department. But from my general experience, I am inclined to think charas is looked upon as a more refined smoke, which is indulged

in by the well-to-do people, who look down upon ganja as the smoke of the lower order. Ganja is smoked principally by the lower classes and by a limited section of the middle class, whose religious prejudice is a bar to their indulging in alcohol. It is also freely smoked by religious mendicants and fakirs in almost every part of Bengal.

21. I should think chur was most liked.

24. Bhang is generally drunk, seldom eaten except as an ingredient in medicine. It is drunk freely by up-country men and also by pilgrims who resort to Baidyanath. A good deal of bhang used to be sold by a licensed shopkeeper at Sultan-ganj when I was Excise Deputy Collector of Bhagalpur, in which district that place is situated. The reason was that pilgrims to Baidyanath used to store their supply of Ganges water at that place previous to starting on pilgrimage, and, when there, used to get themselves supplied with bhang. Its use is almost confined to Hindus. I do not remember to have ever seen its use by Muhannadans. When I visited Muttra and Brindaban, I found it very freely used there by all classes, especially the priests or pandas.

30. Ganja is often smoked in company. Bhang is generally drunk in solitude. I cannot say about charas, the smoking of which I have not much witnessed. Ganja smoking, like bhang

drinking, is, according to my experience, mainly confined to the male sex and to manhood. Children seldom use ganja and bhang.

31. So far as I can judge, the habit of ganja-smoking is easily formed, but not that of bhang-drinking. In the former case there is a tendency for the moderate habit to develop into the excessive.

32. The only custom I am aware of is in respect of the drinking of bhang on the Bijaya Dasami, or the last day of the Durga Puja. It is a religious custom for the worshippers of the goddess in certain localities to drink bhang on that day; but the use of the drug on that occasion is not regarded, so far as my experience goes, as essential. The use is generally temperate, and, being confined to one day in the year, is not at all likely to lead to the formation of the habit.

33. Ganja-smoking is looked down upon as a vice. There is a strong social public opinion against the smokers of ganja, who are regarded as a degraded class. There is a common nickname, "ganja-khor," by which the consumers of ganja are generally known among sober people. The epithet "ganja-khor" is so suggestive that it is often applied to fools, though they be free from the vice of ganja-smoking. The sentiment is so deep-rooted and ancient that it is hard to trace it to its original cause. But I should think that the injurious effect of the habit on the intellect, and through it on the general usefulness of the smoker, was at the root of the sentiment. The habit not only impairs the intellect, but makes the smoker's temper irritable. This also accounts for the sentiment.

34. From what I know, I don't think it would be a serious privation to the consumers of any of these three drugs—namely, ganja, bhang, and charas—to forego its consumption. It would certainly be inconvenient to go without the drug, but the privation would be nothing compared to what it would be in the case of opium or even alcohol. I have witnessed the distress felt by opium-eaters and confirmed alcohol-drinkers when compelled by any accident to go without the daily allowance. I have also seen ganja-smokers and bhang-drinkers similarly compelled to forego their drug, but the distress has not been nearly so great as in the case of either opium or alcohol. I am not in a position to give any idea of the probable number of each class.

35. In my opinion it would not be feasible to effectually prohibit the use of any of these drugs, with the exception, perhaps, of charas, as the hemp plant grows wild in many parts of the country, and its illicit use it would be hard to prevent. I have already said above that the prohibition could scarcely be enforced. If it were possible to enforce the prohibition, it would certainly occasion discontent among the consumers, but not to such an extent as to amount to a political danger. Most probably the prohibition, if effectual, would in some cases be followed by recourse to alcoholic stimulants, and in others to opium. I have said in some cases because religious prejudice would stand in the way of a certain class of consumers to resort to alcohol. This applies to religious mendicants, the "Pandās" of Muttra, Brindaban, and other sacred places; in short, to persons of the Baishnav faith, who, to a man, abhor alcohol as an abomination. The prohibition of the use of bhang in particular would be looked upon as an interference with the religious rites of a certain class of occasional con-

sumers, who, as stated in answer to a preceding question, indulge in its use on certain religious festivals, *e.g.*, on the Bijaya, or last day of the Durga Puja. The prohibition of bhang, again, if absolute, would cause serious inconvenience, as it often forms an ingredient of valuable medicines under the Hindu or Ayurveda system of medicine practised by the kabirajes.

36. When I was in charge of the Excise Department, it was my information and belief that with the rise in the duty of ganja certain lower orders of consumers of the drug betook themselves to toddy and to cheap liquor of the outstills when the latter were introduced on a large scale. The causes are dearness of ganja and cheapness of toddy and liquor. I cannot at this distance of time (my connection with the Excise Department ceased in 1880, when Sir Ashley Eden selected me for special duty at Arrah under the Public Works Department, Irrigation Branch, whence I was transferred in 1885 to my present appointment as Personal Assistant to the Commissioner, Bhagalpur) undertake to prove that the substitution really took place.

37. Yes; there is, so far as I have been able to observe, difference between the effects of charas-smoking and ganja-smoking, in that the effect on the system of the former is not nearly so marked and injurious as in the case of the latter.

38. I think the difference is only in degree, chur being stronger than the rest, and round being stronger than flat.

39. I think ganja and charas-smoking is a less injurious form of consumption than drinking alcoholic liquor. Ganja and charas-smoking, especially the former, does no doubt make the smoker stupid and irritable, and in a very few instances even insane; but in the long run its effect is not so injurious physically and morally as that of alcohol-drinking. Ganja-smoking does not make one so turbulent and riotous as indulgence in alcohol does. It does not lead to so many accidents as are the result of indulgence in alcohol. In short, ganja-smokers do not make themselves so prominent and obnoxious as alcohol-drinkers do. It is a very common thing for drunkards to be boisterous, occasionally to fight in the streets and disturb the public peace, not only close to liquor shops but even away from them; whereas such demonstrations on the part of ganja-smokers are seldom noticeable. One who has witnessed the revelries in a Behar town on the occasion of the Holi festival can only realize to what extent free use of alcohol excites a crowd. The habitual indulgence in alcohol, moreover, shortens life, whereas ganja-smokers seldom kill themselves by even excessive indulgence.

40. Bhang is often an ingredient in medicine prescribed by the native kabirajes. I do not know if any of these drugs, *i.e.*, ganja and bhang, is used in the treatment of cattle disease.

41. Bhang is sometimes used, either alone or mixed with other articles, as an aid to appetite and digestion. I think it often answers this purpose, especially when taken under medical advice in the prescribed quantity. I have no experience of the beneficial effect of ganja as a food accessory, or as a febrifuge, or in any other way. Its use is deprecated by enlightened society.

42. I think the moderate use of bhang is harmless both in its effect on the consumer himself as well as in relation to society. I have seen moderate consumers of this drug not only retain-

ing unimpaired health, but perfectly sober and sensible, and not in the least obnoxious. In fact, it would be difficult, or more correctly speaking, impossible, to know that the moderate consumer had drunk the drug unless he were either seen or admitted to have done so.

43. Perfectly so.

44. I cannot give any satisfactory answer without questioning consumers, which I suppose I am not expected to do.

45. The habitual moderate use of ganja may not be particularly injurious physically, but its mental and moral effect cannot be avoided. It is supposed that the habitual use of ganja leads to bronchitis and other chest diseases. It does impair the moral sense and induce laziness. Its excessive use deadens the intellect, and in a few instances produces insanity. I am not, however, familiar with actual cases of insanity induced by ganja smoking, and cannot therefore give details.

53. My experience does not lead me to believe that excessive indulgence in any of these drugs incites to unpremeditated crime, violent or otherwise. It is in this respect that it is so marked a contrast to alcohol drinking.

54. No knowledge.

55. I think complete stupefaction is possible by inhaling the fumes of ganja, but I have no experience of any actual instance.

56 and 57. No knowledge.

58. I have been so long out of the department that I am not in a position to offer any useful opinion on this point.

59. I have been so long out of the department that I am not in a position to offer any useful opinion on this point.

60. Ganja is not produced in any district in which I have served. I cannot, therefore, answer this question.

61. Unanswered for the same reason.

62. Bhang grows so wild that I think it would not be feasible.

63 and 64. None.

65. In my opinion taxation of ganja was heavy with reference to outstill liquor at the time I was in charge of the Excise Department, but I cannot give any definite opinion with reference to the present state of things, of which I possess no detailed knowledge.

66. I think there should be different rates of taxation for different kinds of ganja. The flat and round ganja contain twigs which have no intoxicating power, whereas the chur or broken ganja is devoid of twigs. It is therefore natural that the last variety should pay higher rate of duty than the two first.

67. Left unanswered, as I don't know the present method exactly.

68. Not that I am aware of. There used to be none such when I was in charge of the Excise.

69. This used to be done when I was in charge.

70. I am not in a position to answer this question.

38. Evidence of BABU RAM CHARAN BOSE, *Kayasth, Deputy Magistrate and Deputy Collector, Alipur, 24-Parganas.*

1. As Sub-divisional Officer in Bagir Hat, Magura, Bishenpur, Supal, and Ranaghat, and Deputy Collector in charge of Excise at Pabna and temporarily in Darbhanga, and Deputy Magistrate in Noakhali, I had opportunities of knowing of excise cases, and in 24-Parganas, too, I had to dispose of excise cases. My information is based on what I could know from official duties and personal acquaintance with some jogis in different parts of Bengal and the North-Western Provinces, and with people by whom some of the produce of hemp is used.

2. The definitions are accepted so far as my answers have reference to. Of ganja the three sorts are flat, round, and chur. Charas is the resinous matter. Siddhi or bhang or bijaya or sabji, the dried leaves of hemp plant.

3. I have seen it growing in Mansha, in Bagir Hat Sub-division and Jessore. Recently an instance was brought to my notice of a large plant grown in the 24-Parganas. The subject of removal of the plant formed the ground of a criminal case.

4. Yes, the plant is the same.

In Mansha several plants sprang up spontaneously from seeds which were thrown off by up-country darwans who served in the zamindari cutchery, and were addicted to bhang or siddhi drinking.

5. The instances in which such plants were observed grew on *bhitta* lands, outskirts of human habitation. I could not exactly give the sea level. The soil was partially humid, and the spots where they grew were places where refuse of sweepings were thrown.

6. A few plants were observed at Mansha.

7. I have seen nowhere hemp cultivated and grown for the purposes indicated.

14. None that I am aware of.

15. (b) I have seen no preparation made from wild plants.

I have seen ganja prepared for smoking, and bhang for drinking purposes. The articles were of cultivated hemp plant purchased from abkari shops. Ganja for smoking is prepared by cutting it to pieces or squeezing it with dried tobacco leaves, and bhang is made into a paste and mixed with spices and made into a beverage for drinking.

16. Bhang is prepared in houses. It can, I believe, be prepared from wild hemp plant too, but I cannot say whether these grow wild or have the same intoxicating property like the leaves of plants cultivated.

17. There is no special class of people by whom such preparations are made.

Bhang is mostly consumed by up-country people, and ganja by manjis, boatmen and fishermen, cartmen, syces, grass-cutters, whose avocations of life lead to constant exposure to sun and water. The up-country sanyasis, mendicants, and fakirs are mostly addicted to ganja-smoking, and bhang is taken by them as a drink too.

18. Cannot speak much of it. Bhang, however, is said to lose its intoxicating property by long keeping, but its medicinal property is said to increase by time. Ganja is said to deteriorate

by exposure and long keeping. With ordinary care both do retain intoxicating property for a year or so. Safety from exposure to moisture prevents deterioration.

19. Yes, so far as I am aware of, for smoking only.

20. This answer has been given in question 17. Charas is seldom smoked. It is used by some people used to night-keeping—Jatrawalas, dancers, and other musicians, the object being to ward off sleep. People used to haunts of immorality and places of public women have often been observed using charas. The number of such who are addicted to ganja and charas smoking is very small compared with the general body of the people.

21. I have seen round ganja preferred to flat ganja. The people, however, who use ganja is greatly confined to lower orders.

22. I know of the use of no foreign charas.

23. I have never seen it (bhang) used for smoking.

24. The answer to this has been furnished in question 17. It is not possible in the absence of statistics to give the proportion of people by whom bhang is drunk. The up-country people who are living in Lower Bengal are mostly addicted to this drug. Amongst those who work, common coolies and labourers betake partially to ganja. The localities are not restricted.

25. On the increase. The reason is mostly owing to a large number of people who periodically come to these parts to betake to labour and find employment around Calcutta and other parts where railways and other works are carried on, as well as to a large number of boatmen and other classes who visit these parts in consequence of free and easy modes of communication which are daily in progress.

26. (a) The proportion is 100 to 1 of excessive consumers.

(b) Almost the same proportions as above indicated.

(c) and (d) The number of habitual and occasional excessive consumers is very limited.

These figures are the result of mere guesses, and I am aware of no statistics.

27. The answer has been given in replies to questions 17 and 25.

28. Ganja is smoked with a preparation by mixing it with dried tobacco leaves moistened with a little water while it is squeezed into a ball.

Bhang is prepared with an admixture of cucumber seeds, pepper, *mouri*, spice, sugar, and other spices by better class of consumers, while the lower order mix it with pepper and molasses. Dhatura is not used. The object is to increase the power of intoxication and give flavour to the beverage. The ingredients have been stated above.

29. Generally in company. Even sanyasis and fakirs who lead a life of solitude prefer the use in company. The use is confined to the male sex. I have seen rare instances of the use of ganja and bhang by females of the mendicant class. Among family women no instances have come to my notice except for medicinal purposes in rare cases. Children have never been observed to consume these articles.

30. Company exercises great influence in inducing the formation of habits. Habits once con-

tracted are not easy to break off. These have a permanent effect on the system, and generate a vitiated taste which it is not easy to give up. Yes; there is a tendency to lead to excessive use.

31. Bhang is, according to a social and religious custom, drunk as a beverage on occasion of Bijaya or the day the Durga idol is consigned to waters. All relations and friends meet on this evening, exchange civilities prescribed by custom, and sip the preparation made. The use is, however, very temperate, and does not for this singular occasion only lead to the formation of any habit. This use on this particular occasion is held to be essential. Bhang or siddhi is only used. The word siddhi means success, and this custom, is believed to lead to success in all undertakings started from this day. It is held to be auspicious.

32. The consumption of ganja is held to be disreputable. The expression bhang or hemp smoker is a term of reproach, and is popularly held to be contemptible. The only public opinion about drinking bhang according to social or religious custom has been stated above. The opinion about disrepute in connection with the smoking of ganja is believed to proceed from the sentiment that such consumption generates a hot and intemperate temper, and leads to want of reason and other deleterious effects on the system. I have known of no custom of worshipping the ganja plant by any section of the people.

33. Yes; it would be a privation, though not so serious as in the case of people addicted to opium. Bhang-drinkers have been observed to get diseases of the stomach for giving up the habit. No statistics are in possession to furnish the figures for probable numbers.

34. I am rather apprehensive to hazard any opinion on this point. Charas use may be feasible to prohibit, but there would be great difficulty to prohibit the use of ganja and bhang. Possibly endeavour to prohibit would lead to illicit consumption and occasion serious discontent, the extent of which I am not prepared to define. The prohibition would be held to be a source of great grievance by up-country men, especially so far as bhang-drinking is concerned. Amongst the class of people who have no prejudice to liquor, such a prohibition would in all likelihood lead to the use of this and other alcoholic stimulants.

35. Several drinkers of liquor and alcoholic spirits have been observed to betake to bhang-drinking. This latter is considered not to be so much deleterious to health. I have known of several hard spirit and liquor drinkers betaking to this substitution. Bhang is a cheap drink too.

36. Cannot definitely reply to this. Charas is, however, thought to be a milder article to puff than ganja. This latter has a great effect, inducing unusual heat of the brain, and generating a rough and hot temperament. The effect of charas, it is said, more induces torpor.

37. Round ganja is held to be more effective. The degree of intoxicating effect which this produces is greater than of the other different sorts, and preference to this is given by consumers.

38. Bhang is less injurious when drunk as it is done than other preparations of the hemp plant. The effect which this produces is slow, while ganja smoked produces a very sharp, strong intoxicating effect by acting on the brain at once.

39. Bhang is admixed with other ingredients, and drugs are prepared by native physicians. The

drug is used for healing complaints of the stomach. I have known of no form in which this is administered in cattle disease except its use in administration with molasses to horses and ponies to remove stomach complaints and refresh them after hard labour.

41. (a) and (b) Bhang is used as a drink to sharpen appetite or as an accessory to digestion. Moderate use of bhang removes complaints of the stomach. Moderate use of ganja is said to remove dullness and *ennui* in case of people used to hard manual labour and great bodily exertions and exposures.

(c) Ganja and bhang are said to have a preventive effect in keeping off malarial influences.

I have known of no use of charas for above purposes.

The fakirs and sanyasis use ganja to induce concentration of the mind and helping devotional purposes. I mean of course the moderate use of the drug. The classes by whom ganja and bhang are used have been adverted to by me in replies to other questions.

42. I say moderate use of bhang is harmless and beneficial; so the moderate use of ganja by sanyasis and fakir classes. The experience of the habit and mode of life of these classes of the people induce me to say so.

43. Yes.

44. To the habitual consumers moderate use produces no injurious effect. Its effect on their system is not perceptible. The effect is refreshing and exhilarating to some extent. The intoxicating effect, if any, is not noticeable. Bhang and ganja to these moderate consumers sharpen appetite. The effect which moderate use of bhang produces to them is like that which is observed amongst tea drinkers, although this does not seem to be so much stimulating. The effect of bhang is of longer duration. It is slow, but lasts for hours. These two drugs do not produce so much lassitude after the effects are over as in the case of alcohol drinkers. The moderate consumers are regular in their hours of consumption. Bhang by them is invariably found to be drunk in the afternoon, and ganja in the morning and evening after bath and ablutions.

45. Bhang produces an oblivious effect in course of time, and induces forgetfulness. Physically it does not seem to be injurious.

Ganja, after one is used for a time to the course, brings on a consolidation of the frame. With the decay, brought about by years, the frame which had been muscular gets attenuated. The person addicted becomes subject to strong coughing, and towards the close it induces dysentery and loss of appetite.

Bhang in course of time has the effect of inducing laziness and impotency or loss of vital power.

Ganja induces heat in the brain. Its undue consumption generates insanity. At first the effect is temporary, which subsequent indulgence confirms into durable deprivation of better senses, and brings on insanity.

In case of temporary effect, restraint and disuse may establish the even tenor of mind, which is liable to disturbance by return to habits of excess.

The marked type observed in case of such insanities is that they become very irascible, hot and

loquacious, and in case of slight opposition offered, flies to rage. These insanities confess to ganja use, and become turbulent and display still hankering for ganja in hallucid moments.

I am not prepared to answer the last portion of the question. I have known of no such instances of weakened intellect.

I am not aware of any cases.

46. Nothing more to add to what I have stated before.

47. None that I am aware of.

48. Nothing to add.

49. None that I have ever come to know. The effect is said to be the reverse, and has a tendency to bring on a disinclination for venereal intercourse.

Ganja, and specially bhang, is said to induce impotency.

50. In the above the excessive use of the articles has been referred to.

51. Yes, of ganja. The use has the effect of deadening the finer sensibilities and inducing turbulence and heat of brain, rendering it less susceptible to fear or consequence of nefarious actions.

52. The excessive use produces a reverse effect, and does not conduce to resorting to such actions, and renders the victim subject to fits unsuited to determined and resolute actions.

53. Yes, ganja does it. It has been in some instances observed to lead to unpremeditated and hasty actions.

I am not aware of its leading to homicidal frenzy.

54. Yes, ganja in some cases, like spirits, is used for such purposes.

55. I have known of no such instances.

I believe complete stupefaction is not induced unless bhang is admixed with other substances.

56. This question has been given reply to in dealing with other previous ones.

I have no information on the subject of dhatura admixtures.

57. I know of no such instances.

58. I cannot speak much of it. I think the system is working well.

59, 60, and 61. Nothing to say.

62. Hemp is not cultivated here.

63 and 64. Nothing to say.

65. Nothing to suggest.

66. I consider the round should be taxed more, considering its comparatively greater intoxicating property. I can suggest no rates.

67. None.

68. There are shops for the vend of ganja and bhang, but I have no suggestions to offer.

69. Yes, to some extent. Enquiries are generally made by the police in regard to the advisability of opening shops in particular localities. It would be better if local public opinion is more consulted. As a rule I have invariably seen some opposition or other raised by residents of the locality in the mufassal when such sites for shops are selected.

70. There are no facts that I am aware of regarding the importation or smuggling of hemp drugs from Native States to which attention might be drawn.

Yes, duty is paid.

There is no general use of untaxed drugs that I am aware of.

39. Evidence of BABU NOBIN CHUNDER SEN, Deputy Magistrate and Deputy Collector, Ranaghat.

1. None except what I have had as a member of the Subordinate Executive Service.

2. Siddhi is same as bhang. It is not applied to dry leaves of hemp plant, but to dry leaves of a separate plant. It is known here as siddhi. Subji or patti is not known here.

3 to 13. I have no knowledge of the questions put in this chapter.

14 to 18. Nor have I any knowledge of the questions put in this chapter.

19. Only for smoking.

20. Lower classes of Hindus generally, such as Bagdi, Duleh, and Goalas. Above 30 per cent. smoke ganja and 10 smoke charas. Ganja is smoked in all places—largely in Santipur and Ranaghat,—while smoking of charas is wholly confined to these two places.

21. Only round ganja.

22. Gorakhpur-made charas is imported from Calcutta.

23. No.

24. Higher classes drink bhang. About 10 per cent., especially in Santipur and Ranaghat. Lower classes take it very little.

25. Consumption of siddhi and charas is said to be slightly increased owing to the abolition of the outstills and the rise in the price of country liquor.

26. They are nearly all habitual moderate consumers in the case of ganja and charas. There are very few habitual consumers of siddhi. It is generally taken occasionally on certain festivals, and as a medicine very often.

27. Labouring classes. I am not aware of any special habits or circumstances which lead to the practice.

28. Ganja.	Siddhi.	Charas.
(a) 2 pice	. 1 pice	. 1 pice.
(b) 4 pice	. 2 pice	. 2 pice.

29. No ingredients are mixed with any of these drugs here. I do not know of any preparation.

30. Nearly always alone; occasionally with a fellow friend. In the female sex only prostitutes use these drugs. Their use is not confined to any time of life. Children never use them.

31. (a) Yes.

(b) Only when the habit is old.

(c) No.

32. (a) Siddhi is used as a custom on the Bijoya Dasami day, the fourth day of the Durga Puja festival. The Tantrik religious sect and Sanyasis use ganja and siddhi religiously.

(b) No; it is not essential.

(d) Yes; it leads to formation of habit. Ganja is injurious to both mind and body.

33. (a) and (b) Public opinion regards it with hatred and contempt, though it is powerless now

to check it. Use of all narcotics are generally held in disrepute, as it is interdicted both by the Musalman and Hindu religions, only a sect of the latter excepted.

(c) No.

34. Yes, to confirmed smokers of ganja, both laymen as well as sanyasis (ascetics). They will suffer in health, at least for a time. About 5 per cent. of ordinary smokers.

35. (a) I don't think.

(b) Very likely.

(c) Very difficult to enforce, as ganja grows wild.

(d) Discontent only among the small number of confirmed smokers.

(e) No; not at all.

(f) Yes. Cheap liquor and opium.

36. None. Reverse is the case as stated in answer to question 25.

37 and 38. Not noticeable.

39. Never saw any one drinking or eating any preparation of ganja.

40. (a) Ganja and siddhi—Yes.

(b) Ganja—Yes.

41. Not aware of any.

(a) Siddhi is used sometimes as digestive.

(b), (c) and (d) Don't know.

All classes use siddhi occasionally as digestive or for bowel disorders.

42. No. Even their moderate use tells on the body and mind.

43. Yes, they are; but ganja smokers are generally men of irritable temper and get easily angry and violent. The word ganja-khor or ganja smoker is therefore a term of reproach, meaning angry and violent.

44. (a) Stated above.

(b) No.

(c) Yes.

(d) No.

(e) Yes, in the case of habitual consumers.

(f) Lasts two or three hours.

(g) Don't know.

(h) Yes.

45. (a) Yes, of all kinds.

(b) Ganja does.

(c) Yes.

(d) In some cases ganja does.

(e) Yes. Causes all these.

(f) Sometimes ganja does, and siddhi in still rarer cases, both permanent and temporary. I am unable to answer the remaining questions.

(g) I have not come across any such cases.

47. No.

49. I am not aware of.
 51. (a) No.
 (b) Violent crimes, such as severe hurts and murders, are induced by excessive ganja smoking.
 53. It does. I know of one case where a murder was committed under the influence of too much ganja smoking by a fakir.
 54. I have had no such cases.
 55. (a) Sometimes they do.
 (b) Yes, in case of persons who don't use them habitually or at all.
 56 and 57. Don't know.
 58. Working well.
 59. No improvement appears to me possible.

- 60 and 61. Not produced here.
 62. Only wild bhang plants grow here rarely in places. They are very inferior, and require scarcely any more control than what at present prevails.
 63 and 64. No.
 65. Yes.
 66. They are already differently taxed. Question not understood.
 67. and 68. No.
 69. Yes. Excise Sub-Inspectors or Police consult the people. Local public opinion ought to be considered.
 70. None here.

40. *Evidence of MR. E. McL. SMITH, Deputy Magistrate and Deputy Collector, Sonthal Parganas.*

1. The following information has been obtained from the persons whose names are given below and who reside in the different parts of this Sub-division :—

Babu Sadananda Pande, Babu Param Chandra Dube, Bholaram Bhagat, Lalji Bhagat, Radha-prashad Bhagat, Bisweswar Bhagat, Supkaran Singh, Jangli Pande, Gour Pande, Kanai Singh, Krisna Mandal, Krisna Singh, Rajabali Sekh, and vendors Jhari Sekh, Akbar Sekh, and Nathu Sekh.

2. The definitions given may be accepted, except that, as far as known here, siddhi, bhang or sabji are the dry leaves of the small uncultivated species of the hemp plant, which is also called siddhi to distinguish it from the cultivated variety.

3. Siddhi plants grow wild in the Rajmahal Dears and also on the banks of the Ganges from Fudkipur to Dhulian in the Jangipur Sub-division and also in the riparian villages between the above-mentioned places.

4. By no other name is the plant known, but smokers from a sense of shame speak of it as baratamaku.

5. As far as known, lands subject to Gangetic inundation and sandy soil are best suited for the growth of wild hemp.

6. Dense.

7. No.

8. Nil.

9. Not able to give particulars.

10, 11, and 12. Not known.

13. No ganja is grown in this sub-division. It would not be impossible to grow large quantities in different parts of this sub-division, such as the portion on the east of the Pakour thana which is subject to Gangetic floods and on the banks of the Banshie river and Tirpatya nadi in Mahespur thana. It is moreover possible to grow it in small quantities in isolated places, but with much care and labour.

14. These products (ganja, charas and bhang) are not prepared in this sub-division.

15. Not known.

16. Bhang is not prepared in the houses of people, but it can be prepared from the hemp plant wherever grown. Ganja can be prepared from the wild plant. But it is not liked by smokers, as it does not produce much intoxication, but makes the eyes burn and gives a bitter taste in the mouth. Not known about charas.

17. Not known.

18. Ganja and bhang will remain for one year. The former quite loses its effect in time and can not be kept with any care for a longer period. It gets spotted with mildew, turns black and rots. This is caused by moisture. Charas, it is said, can be kept even for five years like opium. It is not known whether bhang and charas lose their effects and can be kept, without their deteriorating, for a longer period.

19. The following will deal only with the questions regarding ganja, as charas and bhang are seldom or never used here; when charas is used, it is only for smoking. Ganja is used in no other way.

20. Ganja smokers belong to all classes. Even Sonthals, specially Kharwars (Hinduised Sonthals) are addicted to the habit. The aboriginal tribes are getting a taste for it, but of those who smoke, the majority belong to the middle class. Proportion not ascertainable. Not in any particular locality.

21. Flat and chur are preferred by all classes.

22. Charas is not smoked here. But people say that the charas of Butwal in Gorakhpur is supposed to be the best.

23. Bhang is never used for smoking.

24. Natives of Behar who have come here for work or trade drink or eat bhang, but seldom do so here. Local people never eat or drink this drug.

25. Charas and bhang are seldom or never used here. The use of ganja is on the increase. The people who are present say the reason is that it is easy to procure it here. The shops in the neighbouring districts on the borders pay low rent and sell it at a cheaper rate than what prevails here; and this is one of the reasons for the increase in the use of the drug.

26. Ganja.—The proportion of the consumers are :—

- (a) $\frac{8}{16}$.
- (b) $\frac{1}{16}$.
- (c) $\frac{4}{16}$.
- (d) $\frac{3}{16}$.

As regards charas and bhang—*Nil*.

27. Labourers do not use it much. A large proportion comes from what is known as the bhadralok or middle class, who are comparatively well-to-do. Bad company mainly leads to the habit.

28. The average cost per diem for an habitual moderate consumer is about $\frac{1}{4}$ of a tola or 6 pies worth per day of ganja. For an habitual excessive smoker it is 3 annas.

One of the habitual excessive smokers named Gour Pande uses yearly about 3 seers of ganja, daily about $\frac{1}{2}$ tola weight, $2\frac{1}{2}$ annas worth. One Jata Babaji of Mahespur spends 5 annas per day for one tola of this drug.

29. Only dry tobacco is mixed with ganja; no dhatura is mixed. The object of mixing tobacco with ganja is to make it tasteful, to produce flavour and prevent coughing.

No "bhang massala" is sold in this sub-division.

30. Ganja is mostly used in company. It is mainly confined to the male sex. It is not usual for children to smoke it, though some are known to take to it. Generally the sons of habitual ganja smokers begin the practice early. Otherwise it is not consumed till the age of twenty is passed.

31. It is easily formed if smoked for about two months or so. It is difficult to break off the habit. An old ganja smoker (habitual excessive smoker) says that an habitual smoker may leave it off gradually, but may be liable to be attacked with some sickness. There is a tendency for a moderate habit to develop into the excessive.

32. There is no such custom with regard to ganja. Sometimes siddhi is offered to the Hindu goddess Durga on the last day of the Puja. It is also poured on the head of the deity Siva. Sometimes the offer is made with certain signs, after which the drug is taken away as "prosad" and distributed amongst the worshippers. This is not compulsory and is not much conformed to here.

33. Ganja smokers are called in contempt "ganjeras" or "ganjeri." They are looked down upon and are never believed or trusted. It is considered disreputable to be a smoker. A man who is addicted to it is called a "nisakhor," the habit being regarded as a vice. Even moderate smokers suffer in reputation.

Gour Pande, one of the excessive smokers of Pakour, says that even when he speaks the truth no one believes him, and if a son of his took to ganja smoking, he would thrash him severely. It affects the brain and destroys the body and the consumer is never trusted. Ganja or the hemp plant is never worshipped.

34. It would be a privation to the excessive smokers only.

Thirty-four would be the probable number of the excessive smokers in my sub-division. There are no charas or bhang consumers here, and these drugs are not sold in this sub-division.

35. It would be feasible to prohibit the use of these drugs in this sub-division. It would be consumed illicitly if the prohibition did not extend to the whole province. It would occasion discontent among consumers who are in the minority, but not among other persons. It would not amount to a political danger.

It is said that if ganja is stopped, consumers would smoke dry tobacco and would not have recourse to alcoholic stimulants to any large extent, and would not take to other drugs.

36. There is no reason to believe that alcohol is to any extent being substituted for these drugs.

37. The effects of charas smoking are said to be worse than those resulting from ganja smoking. Charas is stronger than ganja.

38. The effects are the same.

39. Ganja smoking is said to be worse than eating or drinking bhang. The latter does not injure the body and brain as much as charas and ganja, as it is not used excessively or regularly.

40. [The answers from No. 40 refer to ganja and not to bhang or charas, which are not used here.]

Ganja is not used here for medicine for human beings or cattle.

41. (a) Ganja is not used as food for digestion, nor does it help digestion.

(b) To the habitual smoker ganja may give power of endurance for a time, but when the effects wear off the reaction causes distress.

(c) Ganja smokers as a rule say they use it as a preventive of disease, though when they commenced the habit, it was not with this object. After acquiring the habit they continued it, believing themselves more liable to be attacked by sickness if they gave it up.

(d) In no way as regards ganja.

No class really uses it for any of the purposes mentioned in this question.

Not known about charas and bhang.

42. Ganja is not beneficial. Moderate use is not harmless. Long use of the drug, though commenced in small quantities, is harmful to the constitution.

43. Moderate smokers are inoffensive to their neighbours, but excessive smokers are not.

44. Moderate use of ganja stimulates, excites and refreshes persons addicted to it. Does not allay hunger. Produces appetite and intoxication for about an hour. The want of it does not produce much longing or uneasiness. Habitual excessive smokers are always in a state of intoxication. They always crave for it and feel uneasy until it is obtained. The after-effects in such smokers are pain in the limbs and lassitude; no such feelings are experienced by moderate smokers.

45. If the moderate consumer does not take ghee and milk in abundance, ganja will make him thin and impair his constitution. It does not injure digestion or cause loss of appetite. It does not cause dysentery, but produces bronchitis and asthma. It impairs the moral sense so far that he becomes untruthful and shameless, knowing that he is not credited, being addicted to vice. It induces laziness, but not habits of immorality and debauchery. Regular and long use of the drug deadens and weakens the intellect and it is said sometimes causes even temporary insanity, particularly if the regular quantum is increased on special occasions. The symptoms may be rein-

duced by use of the drug after liberation from restraint. There is no typical symptom. Insanes confess to the use of ganja. There is no evidence to indicate that insanity often tends to indulgence in the use of the hemp drugs, or that the drug was used for the purpose of obtaining relief from mental anxiety or brain disease.

46. It impairs the constitution of the habitual excessive smokers. Does not cause indigestion, but causes loss of appetite. Does not cause dysentery, but asthma and bronchitis. The habit induces laziness and impairs the moral sense, as he becomes untruthful, shameless and utterly unreliable. It deadens the intellect and often produces temporary insanity. The symptoms may be reinduced by subsequent use of the drug. One Gour Pande himself confesses that he is ruined by indulgence in this drug. Another high caste native (Mohanando Chakravarti) suffered both physically and mentally. Other cases could also be cited, but it would lengthen this report.

The effects are physically, mentally and morally bad.

47. The habitual moderate use of this drug is not hereditary, and generally does not affect the children of the consumer.

48. It is not hereditary, but affects the children of the habitual excessive smoker. They are often of weak intellect and are moreover thin and sickly.

49. Not known.

50. It tends to produce impotence in the excessive smoker.

51. A small proportion of bad characters are moderate smokers (the exact proportion is not known). It has no connection with crime in general, but it is believed that the agitation among the Kharwars, which latterly had turned more into a political movement than religious excitement, emanated from ganja smokers, who imagined they could take the Government of the country into their own hands, pay no rent to landlords and drive the English out. The sudden ebullitions of feelings which from time to time rise among them spring from the same source.

52. The remarks given in paragraph 51 apply to this also.

53. Excessive indulgence in ganja incites to unpremeditated violence.

I know the following persons who became violent and dangerous lunatics through ganja smoking:—Dharma Manjhi Saoria, Ramdar Pande, Kartik Chhutar, Chunka Sonthal, Baijal Rai, and others.

54. Not known.

55. Complete stupefaction can be induced without admixture.

56. Ganja is not mixed here with any substance except tobacco. It is not mixed with dhatura in this sub-division either for personal consumption or for administration to others.

57. Ganja and charas are not eaten or drunk in this sub-division.

58. It is not capable of improvement in this sub-division.

59. No.

60 and 61. Not produced here.

62. Yes, if feasible.

63. If the cultivation and sale of the drugs are not to be discontinued, I have no objection to the present system of vend, except that shops at low rent should on no account be opened, and no shops on the borders of a sub-division or district should be opened.

64. No.

65 and 66. Yes.

67. No.

68. Four shops exist in this sub-division for the sale of ganja, but the drug cannot be consumed on the premises. On no account should shops where these drugs can be consumed be opened, as people would assemble there, at first for gossip, but eventually for smoking the drug. They would give greater facilities to vendors to encourage people to smoke.

69. The wishes of the local people are considered before a shop is opened. Local opinion should be considered.

70. There are no facts regarding importation or smuggling of hemp drugs from Native States.

Duty is paid in respect to ganja used. There is no reason to believe that untaxed drug is used.

Oral evidence.

Question 1.—I have been twenty-one years in Government service. I was first in the Opium Department and then joined the Civil Department. For a time I was Assistant Settlement Officer, and am now Sub-divisional Officer. I have been nearly twenty years in the Sonthal Parganas, and my replies refer exclusively to that part of the country.

Question 16.—I have not seen ganja prepared from the wild plant, nor have I seen a specimen. I am told it can be prepared, but I have no reason to suppose that it is prepared to any extent worth notice.

Question 34.—I was informed, when making enquiries, that thirty-four was the number of excessive smokers in my sub-division, but I have reason to believe that the true number is about double that figure. The population of the sub-division is 230,000, of whom 128,000 are Sonthals.

Question 51.—The political disturbance I refer to began in 1879, and it again appeared at the Census of 1881. The leaders of the disturbance were Kharwars, who are Hinduised Sonthals. These people have abjured liquor and taken to ganja. The agitation was originally religious in favour of Hinduism as against the old Sonthal worship, but it developed into an agrarian movement against the payment of rent. I do not attribute the movement to ganja, but the movement having begun, the ganja-smokers went further than the others, and were the people who indulged in the wild talk about taking the government of the country and paying no rent. That is to say, an attempt was made to turn the religious movement into a political and agrarian one by leaders who were ganja-smokers, and who, up to this day, raise the same grievances whenever a new officer comes into the district.

Question 53.—Of the five persons named in this answer, Ramdar Pande, Kartik Chhutar, Baijal Rai were, as far as I recollect, sent to the lunatic asylum. The other two recovered. None of these men committed any violent crime for which he was tried. I give them as instances

of persons who were violent and dangerous from ganja-smoking. All of these persons were sent by me for the Civil Surgeon's observation.

Question 63.—By shops at "low rents" I mean shops held at low license fees. Shops are sold by auction, and the amount bid at auction is the license fee. I see no reason for changing this system, if prohibition is not to be carried out. Shops go at low rates, because they are too close together or are not required. I think no shop should be opened unless it pays a license fee of Rs. 50 a month, and that there should be not less than six miles between any two shops. I recommend that no shops should be opened on the borders of a sub-

division or district, so that there should not be competition between shops on both sides of the border. I think also that the limit of legal possession should be reduced from twenty tolas to ten tolas. My object in these recommendations is to restrict consumption. Out of four shops in my subdivision, three pay more than Rs. 50 a month and one pays less, because it is exposed to competition by one of the shops on the border.

The Sonthals are not consumers of the hemp drugs. They take rice-beer for the most part, called in Bengali "pachwai." I consider that hemp drugs are doing more harm than rice-beer. Rice-beer is somewhat stronger than toddy.

41. Evidence of BABU GOPAL CHUNDER MOOKERJEE, Deputy Magistrate and Deputy Collector, Diamond Harbour.

3. Rajshahi, Nadia, Orissa, Shahabad, 24-Paraganas. Abundant in first three districts.

4. Siddhi, bhang, patti, ganja. They refer to the same plant as far as I know.

5. Generally on sandy lands and on alluvial soil.

6. Dense.

7. Nil.

14 and 15. No.

16. (a) Yes.

(b) Yes.

(c) Not known.

18. All deteriorate by keeping; they become useless after two years. Weather is the cause of deterioration, which might be prevented by keeping the drugs in a dry place and preventing moisture.

19. Only for smoking. Ganja is also used in the preparation of medicines for internal and external use.

20. Low classes, labouring classes, coolies, palki-bearers, boatmen, mendicants; without restriction of localities.

21. Round.

22. Imported. Imported from Behar district.

23. No.

24. Bhang is used by all classes more or less. It is generally used more widely by up-country people who drink it in large quantities.

25. Decrease. Many people have betaken themselves to use liquor.

26. One-fifth of the total male population among low labouring agricultural classes, boatmen, palki-bearers, coolies, and mendicants; twenty among a thousand in the gentry; ten in a thousand amongst prostitutes and low classes of females. One-fourteenth of the whole ganja smokers are moderate, the rest excessive.

27. Generally as a relaxation after hard work and in the case of the labouring classes as a stimulant to hard work.

28. Minimum	.	.	1 pice.
Maximum	.	.	1 anna.
Weight	.	.	5 annas.

Fakirs and religious mendicants take about two kutchas a day.

29. Nothing is mixed with ganja and charas; dhatura is mixed with bhang to make it strong; some people are known to mix tobacco with ganja.

30. In solitude, one pice or half anna worth; in company, one anna worth. Both male and female low classes; children rarely.

31. (a) Yes, amongst low classes.

(b) Yes.

(c) Yes.

32. Bhang is used on the Bijaya Dasami festival—temperate. The use of it on a particular day does not lead to the formation of a habit. On Siva-Ratri festivals also bhang is used, and ganja by the sanyasis. It is believed that the use of it concentrates the mind to devotion.

33. Generally regarded as a vicious habit, pernicious to health and injurious to the brain; the use of it by low classes and the results of its use are the chief causes of the disrepute.

34. The low labouring classes who are in the habit of using it fall ill if deprived of its use and fail to labour hard; fakirs and mendicants cannot do without it.

35. It will be difficult to enforce prohibition; it will give rise to discontent and lead to illicit consumption; but nothing like a political danger may be apprehended.

36. Yes; many people who by reason of poverty used to smoke ganja or charas have betaken themselves to the use of cheap liquor.

37. Charas has not the same power of stimulation as ganja or bhang has.

38. No.

39. They are smoked, not drunk.

40. Bhang is prescribed by native kavirajes in cases of diarrhoea and indigestion. Ganja is used in diseases of cattle.

41. Yes; in malarious places bhang is used by some respectable people, ganja always by the low classes—moderately by the former, excessively by the latter, who use it to give staying power under severe exertion or to alleviate fatigue.

42. Moderate use of bhang beneficial in cases of diarrhoea.

43. Yes.

44. Bhang revives exhaustion and serves as a refreshment. It does produce intoxication; allays hunger; creates appetite; effect lasts seven or eight hours; after-effect in case of immoderate use, laxity and giddiness. It produces a longing or uneasiness if not used at the usual hour.

45. (e) Yes.
 47. No.
 49. (a) and (b) Yes.
 (d) Excessive use leads to impotence.
 51. Moderate consumers are not known to commit any offence.
 52. People excessively using ganja are known to commit offences to person and property.
 53. Yes; excessive use is known to excite anger and thus to lead to violent acts.
 54. Yes; robbers and dacoits before attempting the crime are known to use them.
 55. (a) Yes.
 (b) Yes.
56. Thugs, criminals and dacoits administer dhatura mixed with ganja to unwary travellers and pilgrims and to children to rob them of their gold.
 57. Generally smoked.
 58 and 59. By raising the duty immoderate use may be checked.
 63 and 64. No objection.
 68. There are shops, but no houses or premises. The present system is working well.
 69. Yes.
 70. There are no facts regarding the importation or smuggling of hemp drugs from Native States. Duty is paid. There is no general use of untaxed drugs.

42. *Evidence of BABU NAVIN KRISHNA BANERJI, Brahman, Deputy Magistrate and Deputy Collector, Purulia, District Manbhum.*

1. My father, the late Babu Mathura Nath Banerji, was for many years, till the time of his death in October 1870, the Excise Deputy Collector of Rajshahi, and as such had the ganja cultivation under his charge. I was for some three months employed as Excise Deputy Collector of Calcutta. I had during my service to hold temporary charge of Excise Deputy Collector's duties. My experience therefore on the whole is limited.

2. The three products are known by the name given by Dr. Prain, the only difference being that bhang or siddhi is also called sabji at different places.

3. Rajshahi and Jessore.

4. See answer to question 2.

5. Wild hemp grows in rather alluvial and moist, but not brackish, soil.

6. Generally dense.

7. In Rajshahi.

(a) Yes.

(b) Yes.

(c) Yes.

(d) Not known to me.

15. (A) Ganja is smoked with tobacco leaves and prepared tobacco, after having been well moistened, cut, and then broken up by pressure of the thumb on the palm of the hand. Well-to-do persons moisten it with a sprinkling of rose-water when being rubbed on the palm of the hand.

(B) Ganja is not eaten, but siddhi or bhang is.

(C) Bhang, when well prepared, is made from wild hemp leaves boiled in a mixture of milk and water and then dried. It is well kneaded with anise seed and pepper, generally in a stone pot by a *nim sonta* or stick. It is then mixed with a good quantity of water and drunk. With a view to make it agreeable to taste, milk, sugar, spices and sprinkling of rose-water are also mixed up with it before being drunk. The addition of sugar, however, increases its intoxicating power. Most of the lower classes of up-country men drink siddhi. They say it cools the stomach and prevents diarrhoea. Charas is mixed up with prepared tobacco and smoked. Siddhi is also drunk at times by respectable people during the hot season.

16. Formerly, before bhang was included as an exciseable article, it was prepared by the people at their own houses. Siddhi is prepared from the

leaves of the male hemp plants. Ganja and charas are never prepared from the wild hemp plant known as siddhi.

18. Siddhi with occasional exposure to the sun may be preserved without deterioration for about two years. The same may be said with regard to ganja. Dampness and insects spoil them.

19. I have seen ganja being placed in coconut oil and high-boiled for application in cases of skin diseases of children.

20. The Bagdis, Dulias, Baistavs, garwans, sanyasis, fakirs and hard-working menial class smoke ganja. About one-twentieth of the people at least of almost all localities smoke ganja; charas is seldom smoked. It is generally smoked by the uneducated gentry, specially on the occasion of a public fair and entertainment, etc.

21. Round ganja is almost universally preferred for smoking, as it contains more of the resinous matter than in any other kind of it. Poor people for cheapness generally buy the flat ganja.

22. Charas is generally brought by licensed vendors from Calcutta.

23. I have never heard of bhang-smoking.

24. Bhang is generally drunk. It is chewed with betel in rare cases of diarrhoea. Majum, a preparation of siddhi with sweet, is also eaten. It is sold in tablets. It is very seldom sold or used.

25. Ganja-smoking is still on the increase among the lower classes where country liquor is not cheap. The smoking of charas is much on the decline. The drinking of siddhi may be said to be rather stationary.

26.	Ganja. Per cent.	Siddhi. Per cent.
(a)	75	50
(b)	5	1
(c)	15	48
(d)	5	1

27. Hard-working people smoke ganja to give them relief in their work and to protect them from the effects of the climate. People with sufficient means and no work become excessive consumers of the drug. Sanyasis and fakirs who have little or no work and often travel unprotected in different climates cannot do without ganja.

28. Three pice worth of ganja and half pice worth of siddhi is sufficient for a habitual moderate consumer of the drugs. A chillum of ganja cannot be smoked till it is entirely done with. It must be smoked with intervals of a minute or two. When there is no company it must be allowed to be consumed by the fire during the necessary interval. Where there is company it is smoked in turn by all present, and so full use of the chillum is made. Ganja-smoking people generally assemble in numbers of two, three or four people and smoke together. Retail ganja is sold at six annas a tola. Three pice ganja generally admits of three chillums being made out of the same. When ganja is smoked in company two pice of ganja may be sufficient for a moderate consumer per diem.

29. (a) See answer to question 15.

I do not know of any case of dhatura being mixed with ganja or siddhi. Dhatura generally brings on insanity. I do not know what a bhang massala is.

30. All the three drugs are generally taken in company. Females very seldom use them; children do not use them. These drugs are used after the sixteenth or seventeenth year.

31. Those who mix in low company easily form the habit of smoking ganja. Lazy and rich people as well as young folks are apt to run to excess in ganja and charas smoking. Hardly people go into excess in siddhi-drinking. I do not think that ganja-smoking can easily be given up.

32. On Bijaya Dasami a little siddhi mixed with water is taken by Hindu male adult people,—generally a handful is taken. This creates neither any intoxication nor any tendency to take it after the occasion is over.

33. Ganja-smokers are looked down upon. They are generally believed to be intemperate in their language and are credited with little intellect. There is no religious prohibition to the use of these drugs. The sanyasis offer the chillum of ganja after it is ready to god Siva or Mahadeb.

34. The privation from charas-smoking likely creates no injury. Habitual ganja-smoker is apt to get dysentery when he is suddenly compelled to give up smoking it. Nothing serious likely happens in giving up siddhi-drinking, though the general health of the drinker may suffer from total abstinence from it.

35. (a) No.

(b) Yes.

(c) By raising the duty.

(d) Yes.

(e) No.

(f) Not likely in all cases.

36. Generally not yet.

37. Charas is much milder than ganja.

38. Round ganja containing in full all the flower with its resinous matter gives more intoxication than flat or chur ganja.

41. (a) Bhang is believed to be digestive.

(b) and (c) Ganja.

Moderate habitual use.

42. Bhang and charas may be harmless, but ganja not so. Ganja-smokers generally fall a prey to dysentery and bronchial complaints.

43. Generally so, except in rare cases.

44. (a) Refreshment.

(b) Yes.

(c) Nominal.

(d) Partially.

(g) Ganja-smokers generally die from dysentery and bronchial complaints.

(h) Yes; a great longing and uneasiness in the case of ganja-smokers, who become moody and unwell for want of the drug.

45. (a) There is physical improvement. The use of ganja and charas also causes mental and moral debasement.

(b) No.

(c) No.

(d) Yes, saving in the case of siddhi and also charas.

(e) Yes, ditto siddhi only.

(f) Yes, ditto ditto.

At first the insanity is of a temporary nature. It gradually takes a permanent hold when ganja-smoking is continued after plain manifestations of insanity. Yes, the symptoms may be reinduced by use of the drug after liberation from restraint. In lucid moments insanes confess to the use of the drug.

(g) I cannot say.

When a boy I saw an old Brahman get almost stark insane. He was carefully tended by his wife and prevented from use of the drug—ganja. He got well and gave up ganja-smoking.

About the year 1889, when Subdivisional Officer of Diamond Harbour, a Muhammadan having taken excess of ganja became insane. He appropriated the uniform of the police-officer of Geonkhally and came to Diamond Harbour by steamer without a ticket. He was prosecuted. It appeared that ganja-smoking brought on fits of temporary insanity. He was sent to the lunatic asylum and came back all right. He was a strong man of middle age.

47. No.

51. Ganja-smoking hardens the sensibilities of the smoker.

54. Yes, I have heard of this.

58. The duty on ganja is being gradually increased. It has already become hard for the poor labouring classes who take it as an alleviation against hard work, and a protective against exposure, to meet their wants. The duty should not be raised higher than what it is now.

62. No.

66. Yes, according to intoxicating power, or rather on the quantity of the actual flowers existing in several sorts of the ganjas.

67. In marshy, jungly, terai and pestilential places the taxation ought to be smaller than in towns and healthy places.

69. I cannot say whether the wishes of the people are considered, but they ought to be.

43. *Evidence of BABU PRAN KUMAR DAS, Deputy Magistrate and Deputy Collector and Personal Assistant to the Commissioner of Burdwan.*

1. I was special Excise Inspector of the Dacca Division in 1878 and 1879. I was Excise Deputy Collector of Mymensingh in 1880-81 and of Gaya in 1882 and 1883. I was on special excise duty under the Board of Revenue in 1888-89.

2. Yes, the definitions may be accepted. The names used are bhang or siddhi, charas, ganja.

3. In almost every district of Bengal and Behar it grows spontaneously. I have seen jungles of it grown wild in Dacca, Mymensingh, Faridpur, Gaya, and Murshidabad.

4. Bhang and ganja. They refer to the same plant, male and female.

5. I have seen it growing wild both in damp and dry places, *i.e.*, in the damp districts of Eastern Bengal, as also in the very dry district of Gaya. Moist soil is good for it. Soil mixed with manure promotes its growth. I have seen plants regularly watered grown exuberantly. In gardens and within houses also it grows up vigorously.

6. I have seen very densely grown plants on river banks and round wells. It also grows scattered within houses. Seeds thrown or falling from plants lead to their growth.

7. (a) Yes.

(b) No.

(c) The North-Western Provinces and Monghyr bhang is the favourite. The hemp plant is cultivated in Rajshahi and Bogra.

12. I prosecuted and also tried some cases of nourishing and promoting the growth of hemp plants. There was ample evidence of nourishment, such as soil properly prepared, watering, manuring, and otherwise taking care of, but in no case was there any evidence of cultivation. I, however, suspected that it was cultivated in a few cases. In Gaya I found plants grown in a field and being taken care of just as other crops. I found ganja plants grown in Dacca, Mymensingh, and Gaya. The practice is very limited. Growing ganja plants require care and nourishment. The male plants were extirpated in such cases to allow free room to the female plants to grow up. Generally the ganja smokers grow it in places hidden from the public view. Inside house compounds a few only are grown. The largest I saw was in a field in Gaya, may be 20 or 25.

13. Yes, to Rajshahi and Bogra districts.

14. (a) Yes.

(b) No.

(c) Yes.

16. Yes, it used to be largely prepared by a large number of people in their houses. Before 1878 there was a general impression that bhang preparation was not illegal. Many did not know that it was an exciseable article. In 1878 a special excise establishment was appointed, and since then the excise detective establishment has been increased. The excise officers as well as the police since then have detected many cases of preparation and possession of bhang in large quantities, and people have now come to know the law on the subject, and I think its preparation in houses without licenses has much decreased.

It can be prepared from hemp plant wherever grown, but bhang prepared from plants grown

wild in Bengal is not so good. Monghyr and North-Western Provinces bhang is considered much superior, and is the favourite. In Bengal people prepare it for their own consumption, seldom for sale.

Ganja can also be prepared from wild hemp plant if great care is taken and the plants are well nourished and the male plants grown with them extirpated.

I have not known of charas being clandestinely prepared in Bengal.

18. These drugs deteriorate by keeping and lose their effect in about a year. If well seasoned and proper care taken it keeps even for two years. The leaves dry up and gradually lose the narcotic effects. By keeping the ganja in air-tight boxes, safe from exposure and dampness, the deterioration may be delayed.

19. Yes, but ganja mixed with flour and sugar is taken as a sweetmeat by a few of the richer consumers. A mixture of ganja with spirit is taken, I am told, by fever patients.

20. Ganja is taken generally by the lower classes—cultivators, domestic servants, boatmen, fishermen, and other labourers. Charas is taken by a very few people, generally of better classes. It is of higher value. Kabulis also take it. Ganja is largely smoked by sanyasis (religious ascetics) and fakirs, *i.e.*, religious mendicants, both Hindus and Muhammadans take it largely.

21. The practice differs in different districts. In East Bengal districts flat and flat chur are only used. Round is seldom used, and there the smokers had told me that round ganja causes headache and was bad in effect. In Burdwan, again, round and round chur are favourites and flat is not used. Here the smokers say flat does not agree with them. I think it is all habit and prejudice, and that there is no inherent difference between the flat and round.

22. Foreign. North-Western Provinces.

23. In a few cases I heard of the very poorer classes smoking bhang or rather the leaves of wild hemp plant. As far as I can now remember, I think I learnt of the smoking in Tippera and Dacca districts.

24. The Hindus drink bhang all over Bengal and Behar, specially on festive occasions. Bhang is eaten with sweets called majum. It is taken only by the richer classes and in towns. Muhammadans take majum. Bhang is very little consumed by them. It is largely taken by up-country men.

25. The use of ganja has decreased from over 9,336 maunds in 1872-73 to 5,451 maunds in 1892-93, whereas the revenue has increased from Rs. 11,89,706 to Rs. 23,86,066, *i.e.*, ganja is now taxed more than treble than it was twenty years ago. The retail selling price to consumers, to my knowledge, has increased in some places in the last fourteen years by more than 100 per cent. Its use is regulated by its retail selling price and also by the prices at which country liquor and opium are sold. A large number of its consumers belong to the same classes who drink country liquor or take opium. When price of liquor is raised, some of its consumers take to ganja. So also with respect to opium and *vice versa*. It will be seen

from Statement A that in Burdwan in the outstill period the consumption of ganja materially decreased and with the introduction of distillery system its consumption increased. The consumption of excise bhang has increased, but I believe the actual consumption of this article has decreased. The illicit manufacture at home has been very much reduced, and people now take bhang sold at retail shops. Formerly most people took bhang stored up by them, *i.e.*, by collecting leaves of wild plants. Consumption of charas has increased, but its use is restricted to the richer classes of the towns only. In the whole of Bengal in 1892-93, 11 maunds 26 seers were sold, and of this 8 maunds 11 seers in Calcutta alone. In the interior it is very little taken; in villages never.

26. Ganja consumers.	Bhang consumers.
(a) 70 per cent.	10 per cent.
(b) 10 „	Scarcely any, except up-country men.
(c) 16 per cent.	80 per cent.
(d) 4 „	10 „

27. (a) Domestic servants, such as cooks, bearers, waiters, darwans, syces and coachmen, boatmen, fishermen, cultivators, ordinary day-labourers, coal-miners, etc.; (b) sahyasis and fakirs (religious mendicants); (c) some domestic servants and men of better means; (d) men of depraved habits of the lower classes who indulge in excess whenever they have the means to do so.

I know of Brahmins, Khattris, Kayasths, and Vaidyas, and also better class Muhammadans smoking it, but their number is indeed very few. Generally speaking, those whose pursuits cause much physical strain on them take ganja. To my knowledge I know of only a very few—in fact not more than two or three—leading an *intellectual life*, taking ganja.

28. Ganja is now sold generally for Rs. 16 to 20 a seer.

The poorer consumers buy one or two pice worth at a time and not by measurement.

(a) Two pice to an anna a day.

(b) Two annas to four annas a day.

29. With ganja tobacco is used. This is more for economy. I heard of two or three cases of smoking dhatura at Gaya. Dhatura seed ground with siddhi is consumed, but by a very few people. Dhatura is used to make it more intoxicating. I may note that dhatura-smoking is considered good for asthma and this conduces to its use in some cases of asthma.

Bhang massala is sold in a few of the large towns. Its ingredients are generally anise, pepper, dried rose-leaves, and poppy seeds, but it differs in different places.

30. All these three drugs are generally taken by the great body of the consumers in company, but the better classes smoke ganja in solitude, as it is considered unbecoming for men of better means to smoke it. Bhang is taken by better classes in company.

I have no knowledge of charas consumers. Ganja is consumed almost exclusively by the men. It is only women of ill-fame and women of the lower classes, such as mehtars, who take it. Bhang is taken even by women, but very little. It is not usual for children to take any of these drugs.

31. Yes, after some time, *i.e.*, when persons take it for some days together, the habit begins to

be formed. It is difficult for a confirmed habitual smoker to break off the habit. I know of only few cases in which the habit once formed was given up. In case of bhang there is no tendency for moderate habit to develop into the excessive. In fact cases of excessive consumption of bhang are rare. In the case of ganja there is the risk. I cannot, however, say that the tendency of the moderate habit is to develop into the excessive.

32. Bhang is drunk on the last day of Durga Puja by a large number of Hindus, who do not drink it usually. It is also largely taken on the Nowami day and the Lachmi Puja day. It is regarded by religious people as essential. It is generally taken in small quantities. Among the upper classes it is not likely to lead to the formation of the habit of taking it. Ganja is largely taken on Chayat Sankranti festivities and Sivratri days and at the social and religious ceremonies of bairagies (Vaishnavs).

33. Ganja is held in disrepute. For men of means and position it is considered very low and unbecoming to take it. Public opinion is against the consumption of ganja. It is considered as a deleterious drug—injurious to health and intellectual pursuits. Socially a man who takes ganja is looked down upon. The term “ganja smoker” is an epithet often used as expressive of opprobrium.

In the puja (worship) of Mahadev ganja is much consumed. In Eastern Bengal in pujas called Tri Nath mela, Mahadev is worshipped by a concourse of ganja smokers. In Behar in bathans (cowsheds in fields) much ganja is consumed and the god Mahadev is worshipped. In Monghyr the memory of a sadhu known as Sabs Babu where his last ceremonies had been observed, people gather and smoke ganja.

34. I fear the habitual ganja smokers would consider it a serious privation to forego its use. I have servants who smoke ganja habitually. One of them has been now over twelve years with us, and we have done our best to make him give up the habit; he also tried to give it up several times, but failed. I calculate there will be about one and a half lakhs of habitual ganja smokers in Bengal. I take it that about 250 people consume a seer of ganja a day and that about 600 seers are sold a day in the Bengal Presidency.

35. I do not think it would be at all feasible to prohibit the use of bhang. It may be possible considerably to reduce and restrict the use of ganja by stopping its cultivation and prohibiting its use, but it would necessitate the maintaining of an elaborate detective agency. Among the habitual consumers it would certainly cause discontent, but not amounting to any political danger. The prohibition is sure to be followed by recourse to both alcoholic stimulants and opium. It has been practically conclusively found that when ganja is not easily procurable people take liquor or opium.

36. When the outstill system was reintroduced in Bengal, 1878 to 1889, and liquor was sold very cheap, many ganja consumers had to my knowledge taken to country liquor. From 1878 and 1879 as well as in subsequent years I made enquiries on the point and learnt of several such cases, and people said that country spirit was much less injurious than ganja and the change was good. With the reintroduction of distillery system from 1889, and consequent high rise in the price of country liquor, the consumption of ganja increased, and

the lower classes of country spirit drinkers as well as gentlemen classes of small means have taken to ganja.

37. Charas is said to be rather stronger than ganja and its effects remain longer. I was told that when in a hurry or for long endurance it is taken.

38. I do not think so. Flat may be weaker than round and chur, as it is less resinous and not so much agglutinated or closely adherent.

39. Smoking is considered more and quickly effective and therefore more injurious.

40. Siddhi is used as a medicine for bowel complaints and to improve digestion. I have seen kabirajes using it. In fact, it is not properly considered as an intoxicating exciseable article. Bhang is also given to cattle. Ganja is used with cocoanut oil as a medicine for itch and fresh sores. Ganja is smoked for gonorrhoea, asthma, and hydrocele.

41. Charas is not considered beneficial, but the consumers said it enables them to endure fatigue and hunger longer.

Ganja is said to give enduring power and to alleviate fatigue. It is also considered efficacious to withstand malarial effects and damp climate and exposure. My ganja-smoking servants had less malarious fever, and they said it alleviated pain. But it is said to produce diarrhoea or dysentery. One of our cooks, a confirmed ganja smoker, died of dysentery. One of my old servants, a habitual ganja smoker, suffers often from diarrhoea with a tendency to dysentery. He is a moderate smoker. I believe that only a small number take ganja for medicinal purposes. They get into the habit by example of others and by mixing in the company of its smokers.

42. I find even moderate use after some years is not entirely harmless. Ganja specially affects the intellect and vitality. I have not heard of bhang used moderately producing any evil effect.

43. They are inoffensive.

44. Bhang causes pleasantness, makes one talk and laugh, and creates hunger. I believe some intoxication is caused. The duration of effect depends upon the constitution, habit, and quantity taken. Generally the effect is supposed to last up to the time some food is taken, say two or three hours. It brings on sleep and depression follows. One who takes it habitually acquires a longing for it, and the want of it causes uneasiness.

Immediate effect of ganja is exhilaration and excitement, and consumers say refreshing. It certainly produces a certain amount of intoxication. It allays hunger. The effect lasts an hour or so if taken moderately. Want creates longing and uneasiness.

45. (a) No marked effect is immediately observable, but with time, it struck me, its use produced injurious effects.

(b) and (c) Not in all cases.

(d) I have known it causing dysentery in some cases.

(e) It perhaps induces laziness. I have not known moderate use impairing moral sense any more than is to be generally found among the non-smokers of the lower classes.

(f) It affects, I believe, somewhat the intellect. Moderate use I have not known to produce insanity. I know of a few cases amongst gentlemen class whose intellects were blunted.

46. Excessive use to my knowledge has produced both temporary and permanent insanity, at least we thought ganja was the cause of the insanity. In some cases, however, the persons used also to take other drugs—alcohol and opium,—but the insanity came on when their use was given up or reduced and ganja taken in excess. In one case I know by giving up ganja the sufferer is now better, but he is now idiotic. In other cases I have not enquired of the previous history or antecedents. Excessive use impairs the moral sense as also induces habits of debauchery. It does impair the constitution and makes one lazy and averse to work.

47. In one case I know the intellect of the son of a moderate consumer was blunt. I have made no enquiry on the point. The use of these drugs is a hereditary habit in this way, that it is consumed generally by the same class of men, and the children growing up, seeing their fathers and elders smoking ganja, look upon it as inoffensive, and when they become men they take to it without thought or deliberation.

48. In case of excessive use, I have known the evil effect serve as a lesson and warning to the children.

49. I have heard of its being so used in solitary cases. A Hindu gentleman once facetiously said that after taking spirits and smoking madak he closed the evening with a pull at ganja, which he said was the whip.

50. Excessive use has, I was told, a tendency to produce impotence.

51. The bad characters generally take some drug—ganja, madak, or chandu. Some also take country liquor or tari, specially in Behar. I have heard of cases in which offenders, before committing dacoity or murder, fortified themselves by taking ganja. The commission of the crime in such cases is first fixed upon and then some narcotic drug is taken to stir them up.

52. Excessive use of ganja at one time is known to create almost temporary insanity or wildness, in some instances has led to the commission of violent crimes, specially grievous hurt or murder. The excessive use of ganja makes one bad-tempered, violent, and quarrelsome.

53. Excessive indulgence at one time in some incites one to commit unpremeditated violence. I have heard of such cases, but cannot now remember all facts.

54. Yes, ganja is so used, not bhang; its effects are passive.

55. Yes; I know of drugging cases in which ganja was used. I would recommend the Commission to study the special reports of these cases. Last year a few cases occurred of this nature in this division.

56. I have known dhatura smoked with ganja, and in drugging cases generally dhatura is used. It intensifies intoxication, and when taken by people not accustomed to it, it has serious effects—makes one quite insensible,—and I know of cases of death from dhatura-poisoning mixed with ganja or tari.

57. I have not heard of charas being eaten or drunk. Ganja at times is, I am told, taken after being fried with ghee, sweets, etc., as majum. This is taken only by the richer classes.

58. It is generally working well, with careful supervision and management, and by raising the

duty and license fee and thus regulating the retail price its consumption may be reduced.

62. It would not be feasible to control or restrict the cultivation of bhang. It grows wild everywhere. It is generally considered almost innocuous and beneficial in some respects. I do not think it necessary to do any more than levy a small duty on bhang stored and to enforce payment of license fee for its sale.

63. No. Once it was suggested that Government should take the wholesale vend monopoly in its own hands, as is done in the case of opium. I consulted several officers and discussed the proposal with many. I think the present system is better. There is no reason for Government to take the wholesale trade in its hands. All that is necessary is to exercise strict control and supervision over the work of the wholesale vendors both in the producing and importing districts.

65. The duty on ganja for the last twelve years has been more than doubled. It was Rs. 4 on chur ganja per seer in 1878, and this year it is Rs. 9. The license fee for its retail sale by the auction system has been very considerably raised. In 1878 the vendor paid Government Rs. 4½ for each seer of ganja sold. Last year it paid Rs. 10½. This year, with the increase made in the rate of duty,—vide Board's Circular Order No. 95-B., dated 23rd November 1893,—it is still more heavily taxed. Whenever the rate of duty of any particular article is increased, I think it should also be considered whether the duty on other exciseable articles should not be increased. Of late years duty on all articles has been raised. It should be different for different parts of the country according to its special circumstances.

66. Yes; according to the resinous agglutinated intoxicating matter contained in each kind. The rates of duty, as fixed by Board's Circular No. 95-B., dated 23rd November 1893, I fully approve.

67. No.

68. Yes. If smoking at shops be prevented it would not be considered a great hardship. As a rule, people buy ganja at the shops and go home and smoke.

69. No. The Excise officers make their own estimates of requirements and propose shops at places where there is demand. I have, however, never heard of any complaint as regards the sites selected by Government officers for ganja shops.

70. I have no information on the point. Dhatura is the only drug not taxed. It grows wild largely. It is, however, little used. It is taken generally for medicinal purposes, and at times with ganja or bhang to intensify intoxication, and it is also used for drugging purposes. It may be included among exciseable articles and its use restricted.

Statement A showing consumption of ganja in the district of Burdwan.

SYSTEMS IN VOGUE.		Consumption of ganja.
Outstill.	Distillery.	
Year.	Year.	Mds. s. ch.
1878-79 . .	1878-79 . .	61 28 ■
1879-80 . .	1879-80 . .	54 36 9
1880-81 . .	1880-81 . .	49 15 4
1881-82 . .	Nil	48 21 12
1882-83 . .	Nil	44 17 0
1883-84 . .	Nil	43 10 9
1884-85 . .	Nil	42 22 5
1885-86 . .	1885-86 . .	43 35 4
1886-87 . .	1886-87 . .	51 23 11
1887-88 . .	1887-88 . .	57 12 2
1888-89 . .	1888-89 . .	55 31 2
1889-90 . .	1889-90 . .	60 39 8
Nil	1890-91 . .	67 1 12
Nil	1891-92 . .	66 12 9
Nil	1892-93 . .	69 34 15
Nil	1893-94 . .	Not known.

44. Evidence of BABU GOBIND CHANDRA BASAK, Deputy Magistrate and Deputy Collector, Brahmanbaria, Tippera District.

1. I have been serving as the Subdivisional Officer of Brahmanbaria and Chandpur for more than eight years and have seen the whole of the subdivisions of Brahmanbaria and Chandpur in Tippera district. I do not know much about charas.

2. The definitions given seem appropriate. They are locally known as charas, chipta ganja, and gol ganja.

3. In the Tippera district bhang grows spontaneously. Also in the Tippera hills. It grows everywhere on moist land. Ganja grows in the Tippera hills, but to a limited extent.

4. They are known as bhang or siddhi plants and ganja plants. They are separate plants.

5. It grows in a moist climate. A soft soil, but not under water. The rainfall should not be excessive and no water should accumulate at the root of the plant. Elevation has no effect on the growth of the plant, for it grows on low as well as high lands.

6. The growth is scattered.

7. (a) None in Tippera district, but there is cultivation in the Tippera hills.

(c) No, it grows wild.

The bhang plants grow wild everywhere, scattered.

8. No cultivation.

9. None.

10 and 11. No.

12. None cultivated here. I understand it is so cultivated in the Tippera hills. The practice is very limited. I do not know whether the male plant is extirpated.

14. (a) None here—in the hills.

(c) Bhang is produced, but just sufficient for the consumption of the people and for medicinal purposes.

It is produced everywhere.

15. No ganja and no charas are prepared here. Bhang is prepared from the wild hemp. The leaves are simply plucked and dried in the sun. These are stored up and used for eating and drinking with sugar or gur; also used for medicinal purposes by washing in water and drying.

16. (a) Prepared by the people in their own houses. (b) Yes, from the hemp plant growing wild.

17. By everyone using bhang.

18. Bhang deteriorates by long keeping. It may keep good for six months. Ganja deteriorates by long keeping, say, for two years. Bhang and ganja quite lose their effects in time, but ganja will take a much longer time. Exposure to damp and air is the cause of deterioration. Deterioration may be prevented by keeping these in air-tight boxes.

19. Ganja is used for smoking. Ganja is also pounded and used in mixing with sweetmeats. This is so used in Dacca by hardened ganja smokers.

20. The lower classes of Hindus and Muhammadans smoke ganja and very little is smoked by the middle classes and trading classes. I think the ganja smokers may be 3 per cent. in all localities.

21. Flat ganja is preferred. Flat, round, and chur ganja are used, but chur ganja in very small quantities.

23. Bhang is sometimes used for smoking when ganja cannot be got by the consumers. In all localities; by all habitual smokers; and to a very small extent.

24. The up-country men eat or drink bhang, but not the coolies. Kshetrias and Brahmins use it. About 20 per cent. so use it. This is to be found in all places. Natives drink bhang; about 5 per cent. so use it. All classes of the people use bhang for medicinal purposes.

In all localities.

25. The use of ganja was on the increase, as many opium smokers took to ganja-smoking on account of the increase of price of opium, but the increase of duty this year has checked the increase in consumption. The use of bhang is on the decrease, as the present generation do not consider it very necessary for stimulating their digestive organs.

26. Ganja consumers are—

- (a) 75 per cent.
- (b) 15 „
- (c) 8 „
- (d) 2 „

For bhang—

- (a) 75 per cent.
- (b) 0 „
- (c) 13 „
- (d) 2 „

27. The ganja consumers are the working and labouring classes of Muhammadans and Hindus. The Chamars and mehtars among the Hindus. The occasional consumers of ganja are the Sahas, Pals, and low-class Kayasths, who smoke on religious and social festivities, such as Trinath Mela and marriages and pujas.

The habitual consumers of ganja are those who do hard bodily labour and pursue detestable and noxious callings, such as Chamars and mehtars.

The habitual consumers of bhang are the up-country men and very few natives of this place.

The occasional consumers are the up-country men and natives.

28. For ganja—

- (a) 2 pice.
- (b) 2 annas.

For bhang—

- (a) $\frac{1}{4}$ of a pice.
- (b) 1 pice.

Bhang is ordinarily taken with salt or sugar.

29. Dhatura leaves are exceptionally but rarely used with bhang. This is done to increase the narcotic effects. Ganja is ordinarily mixed with tobacco. Dhatura seed is exceptionally mixed with ganja by habitual excessive consumers to increase the narcotic effects. No bhang massala is mixed here.

30. Ganja is consumed 25 per cent. in solitude and 75 per cent. in company of at least two persons. Bhang is consumed in solitude. It is mostly confined to the male sex. People of middle age mostly consume ganja. Habitual consumers also smoke ganja, when old. Low-class women, Baishnabis and unfortunates, also consume ganja. Bhang is consumed also by old men. Children do not consume these drugs. Boys below 16, who are tobacco smokers, also smoke ganja in Trinath Mela, a religious gathering among low people.

31. The habit is easily formed. It is difficult to break off the habit. The moderate habit of using the ganja develops into the excessive. The habit of consuming bhang is not easily formed. It is easy to break off the habit. Its moderate use does not develop into the excessive.

32. Ganja is consumed in Trinath Melas. Numbers of persons meet and sing religious songs. Ganja is then offered to the god Trinath and everyone present is bound to smoke ganja on pain of the god's displeasure. Ganja is consumed by sanyasis to aid the concentration of their minds on a certain subject. Its use is regarded as essential. The use is generally excessive.

It is likely to lead to the formation of the habit. Bhang is sometimes consumed on occasions of marriage or Durga puja, Lakhi puja, and Kali puja festivities, but its use is not essential. The use is temperate.

33. Ganja smokers are generally regarded with disrepute. The public opinion as regards ganja smokers is that they associate with low people and have no control over their passions and are excitable, and Bengalis generally do not approve the use of any form of narcotic. The character of the people is mild and the climate does not require stimulants. Bhang consumers are not regarded with disrepute. There is no custom of worshipping the hemp plant, but ganja is often given as offering to god Mahadev by habitual excessive consumers and by sanyasis.

34. Yes; it would be a serious privation to forego the use of ganja. People can forego their food rather than the use of these drugs. Three per cent. of the people use ganja. But it would not be a serious thing to forego the use of bhang. Two per cent. use bhang here.

35. It would not be feasible to prohibit the use of ganja or bhang. They would be consumed illicitly. It will be difficult to enforce the prohibition. The prohibition would occasion serious discontent among the consumers, but it would not amount to a political danger. The prohibition will be followed by recourse to alcoholic stimulants by ganja smokers.

36. No. It is the reverse.

37. I do not know.

38. The flat ganja is said to produce narcotic effects more quickly and its effects last longer.

39. No; all are alike injurious. Drinking or eating ganja is more injurious. Bhang is seldom smoked.

40. Bhang is used for medicinal purposes by kabirajes and Tantriks. Bhang is also used in the treatment of cattle disease.

41. (a) Bhang is used as a digestive.

(b) Ganja is used under severe exertion and to alleviate fatigue and as a staying power under severe exertion.

(c) Ganja is used as a preventive of disease in malarious tracts.

(d) Nil.

Low-class people use ganja. Middle and upper classes, especially up-country men, use bhang.

The moderate habitual use is referred to.

42. The moderate use of bhang is harmless. Ganja is not harmless.

43. Yes, they are.

44. The moderate use of bhang is refreshing in its effects. That of ganja produces intoxication, but not for habitual consumers. Bhang creates appetite. Ganja impairs appetite. The effect lasts for two hours. Yes; the want of subsequent gratification produces longing and uneasiness.

45. It does impair the constitution, unless milk is taken. It does injure the digestion, but bhang does not. The use of ganja causes bronchitis. The use of ganja or bhang does not impair the moral sense or induce habits of immorality or debauchery. The excessive use of ganja induces laziness, it deadens the intellect, and makes men excitable, and sometimes produces insanity, temporary and permanent. The patients are easily irritable. Insanes confess to the use of ganja.

46. Mentioned under question No. 45.

47 and 48. No; it is not hereditary. It does not affect children.

49 and 50. Ganja is not used as an aphrodisiac. The use of ganja or siddhi does not produce impotence. The excessive use of ganja produces impotence.

51. About 50 per cent. of the bad characters are habitual consumers of ganja. No connection with crime.

52. The excessive use makes men irritable and induces them to commit offences against the person.

53. Excessive use of ganja makes men irritable and may lead to violent crime. No case came to my notice.

54. No, not here; but it is used in big towns, where there are hardened criminals.

55. Not done here. Complete stupefaction cannot be induced without admixture with dhatura.

56. No admixtures are made here. Ganja is sometimes prepared with rose-water to make it mild. No dhatura is used here.

57. It is sometimes eaten with bhang and sometimes with sweetmeats. Its effects are very intoxicating.

These are used by habitual excessive consumers.

58. I am well acquainted with the present system of excise administration. It is capable of improvement.

59. The consumption may be decreased if the duty on ganja is raised and the license fee lowered. This will improve the finances as well.

No duty is levied on bhang. Some sort of duty ought to be levied on bhang, which would be very low at first, say, $\frac{1}{16}$ of the average duty on flat ganja. This will make the system more regular and analogous to the system of selling ganja.

60 and 61. None produced here.

62. I think the cultivation of the hemp plant for bhang ought to be controlled. It will be feasible, though not all at once. Licenses on payment of fees may be granted for the cultivation of bhang plant within certain areas. Persons on whose lands bhang plants yielding more than four chataks of bhang will be found may be prosecuted. This will bring the system gradually within the scope of our detective officers. Bhang plants will then have to be destroyed by Excise officers. To levy duty on bhang will be the next step. The goladars of ganja receive a good profit. Twenty-five per cent. of the same ought to be paid as license fee.

63. For bhang see question No. 62.

For retail vend of ganja see question No. 59.

For retail sale of bhang see question No. 62.

64. None.

65. Taxation of ganja is reasonable.

No duty on bhang is levied, *vide* question No. 62.

There is no duty on liquor here.

66. There should be different rates of taxation on different kinds of ganja, as at present; for flat ganja has twigs, which chur ganja has not, and it will not be expedient to levy the same rate for both.

I do not know about ganja cultivation elsewhere.

67. Objections about ganja and bhang mentioned before.

68. There are no houses where they may be consumed on the premises, nor would any be suitable, for most of the drug is consumed at the houses of the consumers—very little is consumed in the shops.

69. Yes, they are considered, as well as the requirements of a locality. The influential men of the locality are consulted, and the public opinion of the locality ought to be regarded.

70. Very little ganja—say, a few seers—is grown in the Tippera hills. This ganja is very inferior in quality and not much is imported by consumers from the hills. The quantity is very small, for the hill authorities now import ganja under a pass from the Sudder (Tippera) golas. This ganja is very inferior in quality, and I believe no duty is paid for these drugs in the hills.

There is no general use of this untaxed ganja.

45. *Evidence of BABU DINA NATH DÉ, Deputy Magistrate and Deputy Collector, Nadia.*

1. As an Excise Deputy Collector of Nadia, Howrah, Chittagong, and other places I had opportunity of studying this subject.

2. Yes; they are known by the names mentioned above.

3. Nadia, Rangpur, and Bankura. It is abundant in Rajshahi.

4. Ganja, siddhi, subji, and bhang.

5. Moist climate helps to the growth of the wild hemp plant.

6. Dense.

7. No.

8 and 9. Not known.

10. Can't say.

12. No.

14. No.

15. Not known.

16. Can't say.

18. Ganja and bhang deteriorate by keeping. Yes, after two or three years; they keep good for one year with ordinary care. Exposure to air and damp is the main cause. If kept in tin-lined air-tight boxes, they can be preserved for a great length of time.

19. Yes, as far as I know.

20. Generally the lower and working class use ganja. Charas is used by some gentlemen also. The smoking is not confined to particular localities.

21. Both round and chur are preferred in this district. The former is in greater demand than the latter. Chur is preferred in the Kushtia subdivision and parts of Meherpur, and round in other places of this district.

22. Native charas brought from Calcutta is chiefly used here.

23. Yes, rarely. It is not confined to particular localities or classes of people. When ganja is not available, siddhi is smoked; but this, too, is very rarely used.

24. I do not know of any who eats bhang, but a large number of people drink bhang. The people of the North-Western Provinces drink it copiously.

25. The use of ganja is on the increase, though very slight. It is displacing liquor to a slight extent. The lower class who can't afford to buy liquor do smoke ganja instead.

26. For ganja smokers only—

(a) 70 per cent.

(b) 25 „

(c) 2 „

(d) 3 „

100 per cent.

27. From the lower or working class. Boatmen and coolies or day-labourers as well as some of the cultivators who till the soil under the hot sun take to ganja. Mendicant class and gentlemen on religious grounds take to siddhi. Worshippers of Siva take both ganja and siddhi.

28. For ganja—

(a) One tola a week, costing 5 annas.

(b) Two tolas a week, costing 12 annas.

29. Ganja.—Ordinarily ganja is mixed with dried leaves of tobacco plants before smoking. The richer class mixes rose-water to give it a good scent. In exceptional cases, tobacco is mixed up with ganja. Tobacco is used for the purpose of making it milder. Dhatura is not used with ganja, but is used with siddhi for the purpose of increasing the alcoholic power. I do not know of any preparation such as bhang massala.

30. Generally in company. It is mainly confined to the male sex. Some low-class public women smoke ganja also. Ganja, siddhi, and charas are generally taken by adults. No; children do not use any of these drugs.

31. The habit is easily formed. It is difficult to break off ganja smoking. Yes; ganja smoking once begun is developed into excess.

32. It is customary with the Hindus to drink siddhi on the Dasami day of the Durga puja after the goddess is thrown into the river. It is generally temperate. It is not likely to develop into a habit.

33. Except siddhi, the consumption of others is regarded with disfavour. The public opinion is against the use of these, because it leads to drunkenness and debauchery. I am not aware of any custom of worshipping the hemp plant.

34. The drinking of siddhi is essential on the Dasami day and it should not be prevented. The temperate smoking of ganja may not be stopped, as the working class wants it after a hard day's toil. Charas is not smoked in excess.

35. No. I am afraid it would be consumed illicitly. The prohibition may not be enforced. It will cause discontent among the working class. It may amount to no political danger as far as this district is concerned. The prohibition will be followed by the use of tari or pachwai or wild siddhi.

36. No.

37. Yes; the effects of charas smoking are—(1) the consumer gets drunk at once; (2) he gets headache; (3) feels a burning sensation in the eyes; (4) the throat becomes dry and bitter. The effects last for an hour or so. The effects of ganja smoking are—(1) the consumer feels the effects gradually; (2) produces no headache or pain to the eyes; (3) lasts for two or three hours.

38. Yes; the effects of chur and flat ganja smoking are almost identical, and may be the same as those of charas smoking. The effects of round ganja smoking are milder in form than those of the others.

39. These drugs are not eaten or drunk, except siddhi. They are only smoked. Siddhi is smoked in rare cases, when the consumers do not get ganja.

40. (a) No.

(b) Wild siddhi is used in the treatment of cattle disease.

41 (a). Yes.

(b) Yes.

(c) No. It is said, however, that ganja smokers do not suffer much from fever.

The lower class of people. I refer to moderate habitual and moderate occasional use.

42. Yes.

My reasons are—

- (1) It makes a man work harder.
- (2) It makes a man digest his food.
- (3) It is said malarious diseases do not so much approach him.
- (4) It improves the general health.
- (5) Ganja smoking helps concentration of the mind for jog (meditation).

43. Yes.

44. It is refreshing to one who makes a moderate use of it. It produces a slight intoxication. It does not allay hunger. The effect lasts for an hour or so. It has no after-effects. The want of subsequent gratification does not produce any longing or uneasiness. It increases appetite. The effect of siddhi lasts for a longer time than that of ganja.

45. (a) It makes a man dull and stupid for a time.

(b) No.

(c) No.

(d) No.

(e) Produces laziness.

(f) No.

(g) I know of a man who used to smoke ganja excessively of two annas a day. He became mad, but after he had given it up, his intellect was better, and he could work, but had vacant looks, always looked stupid, and was always lazy. Was a timid sort of a man.

46. Ganja and charas.—The man loses his mind and physique. It impairs his constitution; it injures digestion; it produces asthma, and brings on other chest complications. It produces laziness and insanity. It makes a man lose his temper and commit violence.

47, 48 and 49. Can't say.

51. No. It has no connection with crime.

52. Many of the bad characters take ganja to excess for the purpose of committing a violent crime, such as dacoity, robbery, murder, etc., etc. Those who drink siddhi do not commit crime.

53. Yes, excessive indulgence does incite to unpremeditated crime. I know of no case in which it has led to temporary homicidal frenzy.

54. Yes, ganja is so used.

55. (a) Yes, siddhi is so used.

(b) No. Siddhi is mixed with dhatura and given to the victim to drink. He drinks it unconsciously and becomes completely stupefied.

56. If a man is drunk with siddhi, he is given ghi and the juice of jack leaves to drink to moderate the alcoholic strength. I know of a case in which siddhi, pepper (round), and dhatura were ground together, made into a paste, and then mixed with water and drunk. The man was dead drunk for nearly twelve hours, after which he came round.

57. Ganja or charas are not eaten or drunk here.

58. The Excise administration is working well, and is not capable of improvement.

60, 61, 62, 63 and 64. No.

65. Yes.

66. Yes; there should be different rates for different kinds of ganja. Chur pays a duty of Rs. 8, while flat or round pays less. This is reasonable, because there are no stalks in the former.

67. No.

68. Yes. In my opinion smoking in the shop should be discouraged, because it may tempt other people to smoke it.

69. No. It is not necessary.

70. There are no facts regarding the importation or smuggling of hemp drugs from Native States. Yes, duty is paid.

46. Evidence of BABU GANENDRA NATH PAL, *Kayasth*, Deputy Magistrate and Deputy Collector, Naogaon.

1. As special Excise Deputy Collector of Hughli and Howrah, Excise Deputy Collector of Noakhali and Backergunge and Subdivisional Officer of Naogaon, having the entire control and supervision of the cultivation, manufacture and export of ganja, I had opportunities of obtaining the information upon which the following answers are framed.

2. The definitions given by Dr. Prain may be accepted for the Bengal Province. The dried leaves of hemp plant, wild or cultivated, are locally called bhang.

Charas is unknown to this subdivision. The resinous matter which sticks to the feet when ganja is trodden by the cultivator is neither collected nor used as narcotic in this subdivision.

The local names of the ganja produced in Naogaon are—(1) chipti or flat ganja; (2) mehdal or flat ganja shorn of all its big branches; also

locally called flat small twig; (3) gol or rora or round ganja; (4) chur or broken ganja, whether obtained from flat or round ganja.

3. Hemp plants grow spontaneously in Jessore, Backergunge, Dacca, Hughli, Howrah and Noakhali. I think they are abundant in Jessore. These plants have no narcotic in them and are not used as ganja. Some people collect them and use as siddhi by drinking it.

4. It is known as siddhi or bhang, and refers exactly to the same plant.

5. I believe wild hemp may grow in any part of lower Bengal. The climate, soil, rainfall, elevation, etc., make very little difference in the growth of wild hemp. It begins to grow in the cold season, and dies as soon as the cold season is over.

6. The growth of the wild hemp plant is ordinarily dense.

7. (a) Yes.
 (b) No.
 (c) No.
 (d) No.

The ganja is cultivated in a small tract of land about sixteen square miles in area, lying within the three districts of Rajshahi, Dinajpur and Bogra.

8. Of late there has not been any increase or decrease in area. In 1891-92 there was some increase in the area under cultivation. The increase was due to the fact that in the year previous the crop on account of flood failed, and in consequence the price of ganja rose very high, which induced cultivators to extend the cultivation.

9. The cultivation of Naogaon ganja has been fully described in Babu Hem Chandra Kerr's report, paragraphs 38 to 52. Therefore any description that I would give would be recapitulating Hem Babu's description. No change has since taken place in the mode of cultivation.

10. No. The ganja cultivators are of the same class as other agricultural cultivators.

11. No, so far as I am aware of.

12. Nowhere, so far as my experience goes, wild hemp is cultivated for the production of ganja.

13. So far as I am aware, the cultivation of ganja is restricted in Bengal Province alone.

It is grown, as I have said above, to a limited area in the districts of Rajshahi, Dinajpur and Bogra. The cultivation of ganja was at the beginning confined to a few villages in the north of Rajshahi district. Gradually it extended to the tracts bordering the Rajshahi district, but locally situated in Bogra and Dinajpur. Subsequently, by Government order, the limit of the ganja tract was specified and cultivation restricted to that tract. Ganja could not be grown in low and marshy land. I think, for the proper growth of ganja plants, dry climate, mixed soil (sand and clay), high land and facilities for irrigation are necessary for producing ganja. I think it would be impossible to grow ganja in the districts bordering the sea and as well as in the high lands of the districts in the north and west of Bengal.

14. (a) Yes.
 (b) No.
 (c) No.

In Naogaon ganja tract. From 7,000 to 9,000 maunds.

15. Only from cultivated plants, ganja is manufactured in Naogaon. The process of manufacture is simple and indigenous. When the plants are mature they are cut and put in the sun from three to four days. It may be noted that the plants are cut into two or three pieces according to the size of the plant, each piece being about two feet in length. Three or four hours after, when the ganja leaves are dry and partly fall off, the cultivator selects the pieces which would produce ganja and rejects those that would not yield ganja. Thus far the process is the same for manufacture of both round and flat ganja. If the cultivator wants to make his ganja flat, he would take the selected parts and put them in a circle in one layer. A gang of two to five men stand upon the plants and press them down with their feet. This is done in the open field and in sunshine, the place, of course, being

made clean beforehand. When the first layer is sufficiently pressed, another layer is put in. Thus the process is continued till the layers come up to the height of two feet. A cultivator who has a larger number of plants to manufacture will make pressing-places according to the quantity of ganja and the number of men at his command. The first day's pressing being finished, weights are placed on the heaps of ganja plants so pressed. A *chatai* or country mat is put on the top of the heap below the weight, in order partly to give uniform pressure and partly to protect from rain and dews. It is also noticed that the pressing men themselves sit upon the top of the heap and act as pressing weights. On the second day the plants are taken out from the heaps and again put in the sun for about three to four hours. When some of the leaves fall off again they are pressed in the manner described above. The pressing process is continued from three to four days. When the cultivator finds that the flower with small leaves has taken a flat shape and resinous matters sufficiently adhered together, the plants are spread over the field to dry; and when they are dry, they begin to brush off the remaining long leaves by means of their feet. The plants are then, at their convenience, made into bundles of about two seers in weight.

The process of making the round ganja is almost the same as flat, with this difference, that the former is rolled down with hand and feet to give it a round shape.

The chur ganja is not separately manufactured; the bits that drop down during the process of manufacture are collected and separately stored and is called chur. Recently, however, the cultivators, in order to get a ready sale, take off the flowers from the flat ganja and sell them without the branches.

(a) Naogaon ganja is only smoked. I am not aware of people eating or drinking it. The process of smoking is this:—Smoker would take a small quantity of ganja, put it on the palm of his left hand and pick out the seeds and leaves that might be in it with his right-hand fingers, occasionally blowing with his mouth to separate them. He would then bathe the ganja with water in order to clear off any extraneous substance. He would roll it up with a small bit of tobacco leaf, and then cut it fine with a sharp knife, as they cut the American tobacco before smoking. He would put it in a small-sized chilum. Some smokers first put the ganja and then a layer of native tobacco upon it. A *huka* is scarcely used for smoking ganja. The difference between smoking tobacco and ganja is this:—The former is smoked with easy pulls, whereas in smoking the latter a smoker would pull his pipe so long as he can keep his breath.

16. Bhang may be prepared generally by the people in their houses. It may be prepared from hemp plant wherever grown. Ganja and charas cannot be prepared from wild plant wherever grown.

17. Ganja is prepared by the ordinary cultivators, Hindus and Musalmans.

18. The drugs deteriorate by keeping. It quite loses its effect in time. From two to three years it keeps good with ordinary care. Evaporation of the narcotic matter is the cause of deterioration. If the drug is kept in hermetically sealed tin boxes it might prevent deterioration.

19. The answers given under this chapter refer only to ganja. Naogaon ganja is only used for

smoking. I am not aware of its being used in any other form.

20. Ganja is smoked generally by people of the lowest class, such as Bagdi, Dulia, Behara, domestic servants, groom, Behari darwan, Dosad, Chamar, Malla, Kairi, Domes, Nunia of Behar, fakir, sanyasis, jogi, Boistab, songster. Among these classes, 75 per cent. smoke ganja. Ganja is consumed in larger quantities in East Bengal and Behar. Patna, Mymensingh, Dacca, Champaran and Saran may be specially mentioned. Very little ganja is consumed in the tract where it is grown.

21. I do not believe that preference is given to any particular ganja, flat, round, or chur. The consumption of round ganja is confined to Calcutta and districts about it as well as Orissa division. In the rest of the districts flat ganja is consumed. The chur ganja obtained from round is consumed in the locality where the round is imported, and the flat chur in like manner consumed in the districts where flat ganja is imported. It is said that the smokers in or about Calcutta prefer round ganja. I do not think it has any meaning; for otherwise the large number of people of flat consuming districts residing in Calcutta would have demanded flat ganja had there really been any preference for any particular sort.

22. I have no knowledge.

23. I don't know of bhang being used for smoking. My experience is that it is used for drinking only.

24. As far as I am aware bhang is drunk or eaten by the people of Behar. The consumption is not confined to any particular class. The lower class consume more than the upper class. 75 per cent. of the lower class and 50 per cent. of the upper class either drink or eat bhang.

25. I have no idea of the consumption of charas or bhang. The consumption of ganja in the last decade is steady. Some twenty or thirty years before the consumption of ganja was three times over, compared to the present consumption. The cause of decrease is attributed to the fact that there was very small duty on ganja before; with the gradual increase of duty and imposition of fee for selling ganja the consumption decreased.

26. The proportion of consumers of ganja, in my opinion, is as follows:—

- (a) 20 per cent. habitual moderate consumers.
- (b) Out of this 20, only 5 are excessive consumers, or 5 per cent.
- (c) Occasional moderate consumers 80 per cent. or 8 in 10.
- (d) Occasional excessive consumers are 10 out of 80 or 10 per cent.

27. Fakirs, jogis, sanyasis, cooks and palki-bearers form the class of habitual moderate consumers; and among these the mendicant class are habitual excessive consumers. The occasional moderate consumers are taken from the lowest classes of both Hindu and Musalman, such as Dosad, Nunia, Chamar, Malla, Dhangar, Bunwa, Dulia, Dome, Bagdi, Keora, Mether, Bhumali. The occasional excessive consumers among these classes are those who otherwise turned vagabond. It is said that, as a matter of course, people taken to ascetic life must take to smoking ganja, because these people think that it is not possible to stand the hardship of ascetic life unless some sort of stimulant is used, and they take to ganja smoking as it is cheapest of all intoxicants. Those of

the new recruits who had not the inclination to smoke led to the practice by their keeping company with those who smoke. With regard to the other classes of consumers, the circumstances of their living in society which indulge in smoking ganja and their doing very hard labour without proper food and rest lead to the practice. To this may be added the general hankering of men for some refreshment to kill the fatigue of hard labour. Examples are not wanting of people acquiring the habit of ganja smoking by first using it as medicine. For instance, a man suffering from chronic fever, dysentery, diarrhoea, gout, etc., is advised the smoking of ganja as a remedy.

28. The average allowance of habitual moderate consumers is two annas weight of ganja or 22½ grains, the cost of which is only two pice.

The average allowance of habitual excessive consumers is one tola or 180 grains per diem, the cost of which is four annas.

29. The only ingredient mixed with ganja is tobacco leaf. I am not aware of any other ingredient being used ordinarily or exceptionally. Dhatura is not used. The object of mixing tobacco leaf with ganja is to give it a flavour.

I have no experience about "bhang massala."

30. Generally ganja is smoked in company ordinarily consisting of two. Those who are dependents only seek solitude in order to conceal their habits from their betters. Ganja is chiefly consumed by the male sex. Some of the women of ill-fame are known to smoke ganja. Those women again belong to the lowest order of the unfortunate class. Generally young people are seen to smoke ganja between the age of 16 to 45. It is not usual for children to consume ganja.

31. I think the habit of consuming ganja is rather easily formed, since the class of people from which the consumers are taken consider ganja as only a bit stronger than tobacco, which is universally consumed in Bengal. The habit, I think, is not difficult to break off like other intoxicants, such as opium, madak, and liquor. The tendency of moderate habit developing into excessive depends much on the mode of life the man leads. An honest and respectable smoker, who uses ganja as pain and hunger killer, would not go to excessive, while a smoker who has less worldly ties and is not required to work for food would generally go to excess.

32. The consumption of ganja is not required by any social or religious custom. Bhang is, as a social custom, drunk as sherbet on the fourth day of the Durga puja. While the male members of the family go out with the idol to throw it in the river, the females prepare the bhang, which consists of the grinding of bhang leaves with spices, and then mixing it with sugar and water. On the return of the males, they are offered this drink with other sweets. The children do not drink. Very few old people drink. It is consumed by most of the young people. It is not essential that bhang should be drunk as a custom. The use is generally temperate, and there is no likelihood of leading to the formation of habit.

33. The smoking of ganja is regarded disreputable by the society generally; but such is not the case with regard to bhang. There is, however, no social or religious public opinion in regard to the practice. The sentiment which makes the people consider the ganja smokers disreputable is attributed to the fact that ganja is the cheapest of all intoxicants, just as gentlemen going to the cheap

side and thereby losing respectability. I am not aware of any custom of worshipping the hemp plant on any occasion by any sects of the people.

34. I think it would be a serious privation to all classes of consumers to forego the consumption of ganja. The classes which consume ganja are the poorest and lowest classes of the society. Ganja, being the cheapest of all the intoxicants, is consumed by the poorest class. If they have to forego smoking ganja, they cannot possibly take to other intoxicating articles, because they are costly. If the consumption is stopped, they would take to smoking *dhatura* or some other deleterious drugs of wild growth. When I have said that the whole lot of consumers would feel the privation, I need not give the number.

35. I do not think that it would be feasible to prohibit the use of ganja and bhang. The drugs would be consumed illicitly. I doubt if the prohibition could be entirely enforced. The nature of the country, the domestic arrangements of the people, the peculiar zenana system of the country, and the sympathy of the police and the excise offices with the consumers, and the cost necessary for the prevention, would, I am sure, thwart all our attempts to prohibit the consumption of ganja and bhang. The prohibition, I should say, will create discontent among the consumers who would naturally question the justice of the British Government about their freedom of action. I would not, however, anticipate any political discontent, because, loyal as the people are, they would always bow down to the decision of the *sarkar*. The prohibition would be followed by recourse to *dhatura* or other drugs, but not to alcoholic stimulant.

36. I don't think that alcohol is being substituted for any of these drugs.

37. I have no idea about the effects of charas smoking.

38. No, not at all.

39. I think that the smoking of any preparation of hemp plant is a less injurious form of consumption than drinking or eating. The reason is that any form of smoking is stronger and therefore difficult to consume more than drinking or eating it, which is easier.

40. I am not aware of these drugs being prescribed on account of their medicinal qualities by any school of native doctors. They are not used, so far as I know, in the treatment of cattle disease.

41. The moderate use of ganja and bhang may, in my opinion, be beneficial in its effects as a food digestive. The moderate use of ganja undoubtedly gives staying-power under severe exertion or exposure and alleviates fatigue. Its use acts as febrifuge and preventive of disease in malarious and unhealthy tracts. It is said that the use of ganja helps in concentrating thoughts. The few of the upper class who use ganja smoke it as digestive. All consumers of the lower class use it to give staying-power or to alleviate fatigue. Among the consumers whose ordinary pursuits make them liable to exposure, work in water or colliery, use it as preventive. Under advice of native doctors, some people are seen to get rid of chronic fever by smoking ganja. Seventy-five per cent. of these smokers use ganja for the above purposes. In the above, I only refer to the moderate occasional use of the drug.

42. The occasional moderate use of ganja is not only beneficial but also harmless.

43. Of all persons using intoxicants, one sort or other, the ganja smoker is the most inoffensive of all to his neighbours.

44. The moderate use of ganja invigorates the habitual consumers. It is no doubt refreshing. It exhilarates but does not inebriate. It allays hunger but does not create appetite. Its effect lasts about an hour. It is said that it has no after-effects. I do not think that the want of subsequent gratification produces any longing or uneasiness.

45. I do not think that the habitual moderate use of ganja produces any noxious effect—physical, mental, or moral. It does not impair the constitution in any way. It does not injure the digestion or cause loss of appetite. It does not cause dysentery, bronchitis or asthma. It does not impair the moral sense or induce laziness. On the other hand, it makes people active. I do not think that it induces habits of immorality or debauchery. It does not deaden the intellect or produce insanity. So far as I know, insanity, mental derangement, mental anxiety, often tend to the indulgence of ganja, and people are said to obtain relief in smoking ganja.

46. I am afraid habitual excessive use of ganja produces mental derangement; impairs constitution; brings on dysentery; deadens intellect and induces laziness.

47. No, and does not affect in any way the children of the moderate consumers.

48. No.

49. The moderate use of ganja and bhang is practised as aphrodisiac by some. Some prostitutes do so use. I have no experience whether this form of use is more injurious than its use as an ordinary narcotic. I am not aware of ganja smoking producing impotence.

50. Answer same as above.

51. No. The moderate use of ganja has no connection with crime in general or with crime of any special character.

52. Same as above. During my fourteen years' experience as Judicial Officer, I hardly came across criminals who are habitual ganja smokers or that moderate or excessive use of ganja induced them to commit crime.

53. No such case came to my knowledge. There is nothing peculiar in ganja to incite unpremeditated crime, violent or otherwise.

54. I have heard of this old story that robbers and dacoits fortifying themselves with smoking ganja commit dacoity or theft. Probably there might have been some truth about this story a century before, but in my experience as Deputy Magistrate I never came across a single case of the nature described in this question.

55. I have never come across such case. I do not think that complete stupefaction is possible by smoking ganja without admixture.

56. Ordinarily no substance except tobacco is mixed with ganja. I have no knowledge if admixture of other substance would make any difference in its effect, either used in moderation or in excess. I have no information regarding the admixture of *dhatura* for personal consumption or for administration to others.

57. I don't know that ganja and charas are eaten or drunk.

58. In my opinion the excise administration of Bengal in respect of ganja is working very well. Every system is more or less capable of

improvement and some improvement may be suggested.

59. The following are some of the suggestions indicating the direction in which improvement is possible:—

1. To strengthen the present staff of officers and men engaged in the supervision and control of the cultivation of ganja.
2. To reduce the quantity of ganja which a person is allowed to possess from twenty to five tolas. This will minimise smuggling, and at the same time will act as prohibition to the consumer who has a tendency to go to excess.
3. To provide for punishment for possession of ganja of any quantity for which duty has not been paid. This will check consumption of ganja on which duty has not been paid, and at the same time will benefit the revenue.
4. To authorise all the excise officers, specially those employed for the supervision of cultivation, to make search for ganja without the assistance of police, as they are, under the present law, required. This will check illicit cultivation and thus tend to decrease the consumption.
5. To weigh ganja manufactured by the cultivators of Naogaon and not to depend upon the guess weight which must necessarily be incorrect. This is necessary both from administrative and moral point of view. Ganja passing out from the hands of cultivator without payment of duty must necessarily be cheaper. Therefore it will increase consumption.
6. To store ganja in public warehouses. At present ganja is stored in the house of the cultivator, who can smuggle a portion of it without being detected.
7. To provide punishment for taking away ganja plants from the field by other persons than the cultivators.
8. To provide the Subdivisional Magistrate of Naogaon to exercise criminal jurisdiction in all ganja cases arising within the ganja tract, which at present is locally situated in the districts of Bogra and Dinajpur where the ganja cases are now tried.
9. To reduce by half the rate of duty on different sorts of ganja in the ganja-producing districts, Rajshahi, Bogra and Dinajpur. On general principle, the price of an article should be cheaper at the place where it is produced. On this principle the duty of opium is nearly half of what it is in most other districts of Bengal. This will tend to entirely check or eradicate the petty smuggling which at present exists and which it is impossible to check under the present law and rules.
10. To increase the duty of all sorts of ganja, specially chur. In my opinion we have not raised the duty to such an amount where we should stop, so that overtaxing might not induce illicit cultivation. Chur ganja, it is admitted,

even at present, pays less duty in proportion. Proposal for its increase has been submitted and it is anticipated that the increase will be sanctioned.

11. There should be only one sort of ganja manufactured. I would propose to turn all ganja into chur, to pack it in uniform bundles and distribute like opium to all the treasuries and sub-treasuries of Bengal for sale.
12. To buy up the whole produce from the cultivator as soon as it is manufactured, and to distribute it to the several districts according to their requirements, keeping a reserve stock at Naogaon.
60. The cultivation of Naogaon ganja and its manufacture are sufficiently controlled. I would, however, recommend the appointment of two additional supervisors during the manufacturing season with a staff of peons.
61. I have no experience.
62. I am not aware that the cultivation of hemp plants for production of bhang is controlled in any way. No control, I think, is feasible, since these plants grow wild all over the country.
63. The present system of wholesale and retail sale of ganja, charas and bhang is the best. No one would have any objection to it.
64. There would be no objection to the existing regulations governing the export and import of ganja.
65. In my opinion the taxation of ganja, charas and bhang is reasonable with reference to each other, but not quite reasonable with reference to alcoholic or other intoxicants. I have already proposed the increase of taxation of ganja in my reply to question No. 59. Four pice worth of liquor or tari could not make any impression in the consumer, but a pice worth of ganja is sufficient to intoxicate a habitual smoker and sure to kill a man who never smoked before. Charas is very little consumed, and any increase in duty on this article will not matter much. Bhang, as I have said before, is grown wild all over the country and could be had for collecting. Bhang pays a very small duty of eight annas per seer. If the taxation is raised, the consumer would not come to our shop but would collect it from the wild plants. Had it been possible to eradicate the wild growth of bhang, I would have recommended an increase in the taxation of this article.
66. In my opinion it is necessary that different rates of taxation should be for different kinds of ganja, flat, round and chur. In Bengal, ganja is only grown in Naogaon. In Gurjat in Orissa some sort of so-called ganja is collected from wild plants. Each kind of ganja should be taxed in proportion to the narcotic matter that each is supposed to contain. On this principle, the present rate of taxation was fixed.
67. Excepting the remarks made by me in the foregoing replies, I have no objection to the present method of taxing.
68. There is no objection to the consumers smoking ganja in the licensed shop. But ordinarily the smokers take away the ganja from the shop and smoke in their own houses. The shops are by no means disreputable.
69. Ordinarily the wishes of the people are not consulted or considered when a shop is opened in any locality. I don't think it is necessary to

consult or consider public opinion, as a ganja shop is not a nuisance.

70. I am not aware of the importation or smuggling of hemp drug from Native States into Bengal. In the ganja-producing tract of Naogaon, small quantity of ganja is used surreptitiously; consequently no duty is paid on it. This cannot be prevented in a place where the drug is grown, and it is difficult to bring the consumers within the provision of law. There is no general use of untaxed drugs, so far as I am aware of.

Oral evidence.

Question 1.—I have been fourteen years in the service, nearly two years and nine months as Sub-divisional Officer of Naogaon.

Question 3.—The wild hemp plant generally grows in uncultivated land, either in the homesteads or fields. It does not grow in the jungle or in sandy *churs*, but it does grow on alluvial *churs*. I do not think I have seen a plant in alluvial lands; but I have seen it near homesteads and in other places. The wild plant grows in the cold season, and the leaves are gathered in February and March. In Bengal the plant could not last till June or July; but I cannot say what may happen in other parts of India.

If the wild plant were cut down it would spring up again from its seeds. There was an order for its extermination in force for one season, and in many districts the attempt was made. Orders were issued to the chowkidars and villagers to carry it out. The order was rescinded because it was seen that it would be oppressive. It would be impossible for the people

to exterminate the plant in the waste strips by the roadsides and cattle-grazing grounds; but it might be done in the homesteads without difficulty. The plant cannot grow in the cultivated fields, because the people weed it out.

The alluvial *churs* to which I refer are new land thrown up by the river. The seed is brought into these lands by the river and so springs up.

In saying it would be impossible to eradicate the plant in the strips of waste land and sides of fields, I mean that there is no agency to do the work or anyone to hold responsible. The growth is not very large on these lands, and the amount of it would not cause difficulty, though the operation might take time.

Question 34.—I say that consumers would take to dhatura if deprived of hemp, because there are people who cannot do without some stimulant, and I have seen people who cannot afford to purchase ganja smoke dhatura. In my answer 56, I am referring to the mixture of dhatura with ganja. That I have not seen. Both leaves and seeds and flowers of dhatura are smoked. People afflicted with asthma commonly smoke dhatura. By other drugs to which people would have resort, I refer to the leaves of the wild hemp plant. I have seen people, one or two, smoke dhatura who had not asthma. Those one or two persons belonged to the Chandal tribe, a low caste of Hindu. One man was my own mali, and the other was a relation of his. They washed the seeds or leaves up in their hands like ganja or tobacco and put it in their chillums. I did not see the stuff gathered from the plant; but I saw in the hands of these people, and could recognise it, for I have seen other people use it.

47. Evidence of BABU SARAT CHANDRA DASS, Deputy Magistrate and Deputy Collector, Rajshahi.

Oral evidence.

I am Excise Deputy Collector of Rajshahi. I have been eight years in the district, five years as Subdivisional Officer of Naogaon and three years as Excise Deputy Collector at Rajshahi. I know Chittagong, Tippera and Noakhali also. I was Assistant to the Commissioner in Chittagong and Noakhali and Excise Deputy Collector and Settlement Officer in Tippera. I am a native of Tippera. My experience is confined to the districts I have named.

I have seen the wild hemp plant at the foot of the hills in Tippera, Noakhali and Chittagong, and also in Rajshahi. In places the growth was very dense, but I cannot say it was abundant in any district. The plant dies off completely each year and the seeds fall off and germinate. I do not think the seeds are affected by damp, but I found the plant on high sites near villages where there was no shade, not in alluvial lands. The cultivators are careful to keep their ganja seed dry

and say that moisture damages it. I do not think the seed of the cultivated plant is the same as that of the wild plant. The wild plant begins to appear in November and disappears in January. This does not correspond with the period of growth of the cultivated plant.

As Settlement Officer I frequently inspected alluvial and *chur* lands in Tippera, and never saw the plant in such places. I think therefore there must be some mistake about the information given to the Commission that the plant grows in lands of that kind in the Bhagalpur and other alluvial districts. But I know of no scientific reasons why the plant should not grow in these lands. I have never heard of the plant growing in such lands.

The places in which I saw the plant were near village sites, and I think it had sprung from wild seed, because the leaves of the wild plant differ from those of the cultivated plant in that they are broader.

48. Evidence of BABU GANGANATH ROY, Kayasth, Deputy Magistrate and Deputy Collector, Chittagong.

1. I have been Excise Deputy Collector of this district for nearly two years and a half, and have thus had the opportunity of knowing something respecting matters connected with hemp drugs in

regard to which my answers are framed. As Deputy Collector, but not connected in any way with excise administration, I had occasion, while in the districts of Shahabad, Saran and Champaran, and

also while I was Deputy Inspector of Schools in the district of Rangpur, frequently to move in the interior, which helped me to acquire some knowledge of the hemp, as I saw it grow there in a wild state.

2. Dr. Prain's definitions of ganja and bhang may be accepted as correct. Charas is a product of the North-Western Provinces and Nepal, and it is not used in this district. I have no personal knowledge of it; but, from what I have heard and read, I believe the definition thereof to be also correct.

In this, as in the other districts of Bengal, the dry leaves of the hemp plant are known differently as siddhi or bhang. In the province of Behar they are known as bhang or sabji. Some Beharis call them patti, which signifies leaves.

Charas is not used in this district, but in other districts of Bengal and in Behar. Where it is consumed it is known by that name.

The local names of flat, round, and chur ganja which are evidently mere translations, are respectively chipta, gol and chur ganja.

3. The hemp plant grows spontaneously in the districts of Rangpur, Champaran, Saran, Shahabad, and Chittagong—in the first three districts abundantly.

4. In the districts named above it is known as bhang. Wild hemp in the hill tracts of Chittagong is known as *jumya* or *kaua* ganja. They refer to the same plant belonging to the natural order *Cannabaceae*.

5. I believe it flourishes best on sandy soil mixed with clay and in humid climate.

6. Ordinarily rather dense.

7. Not cultivated in this district.

12. I have no reason to suppose so.

13. Yes, it is cultivated in a tract of country known as ganja-mahal, with its head-quarters station at Naogaon in the district of Rajshahi. I do not know why that tract was selected.

14. (a) (b) (c) Not prepared in this district. Ganja is prepared in the ganja-mahal referred to in the above. Charas is not prepared in the provinces of Bengal and Behar. I do not know where bhang is prepared. Having never been in Rajshahi, I cannot say to what extent ganja is manufactured in the ganja-mahal.

16. Bhang is not prepared in this district. It can be prepared from the hemp plant wherever grown. I do not think ganja can be prepared from the wild hemp wherever grown, because male and female plants growing promiscuously and the former not being extirpated, the female plants will run into seed and thereby make the flower tops useless for the purpose of smoking. Of charas I do not know anything.

18. Ganja deteriorates by keeping, and so does bhang. Bhang and ganja lose their effects in time. With ordinary care ganja will keep good for two years and bhang for one year. The cause of the deterioration for ganja is the loss of its intoxicating power, while bhang is liable to be eaten up by maggots. I do not know of any device, nor do the persons dealing in these drugs seem to know of any for preventing deterioration.

19. Ganja is used mostly for smoking. Sometimes it is used in the preparation of a kind of sweetmeat known as majum, an exciseable article, composed of ganja or bhang and milk, sugar,

aniseed and some other spices. Ganja is used by kabirajes (native physicians) in the preparation of medicines for chronic diarrhoea, piles, rheumatic pain, skin diseases.

20. Charas is not used in this district. Ganja is smoked by fishermen, Haris, Kahars, bearers, coolies, mehtars, religious medicants, and also other Hindus and Muhammadans as well as Christians and Buddhists, the proportion being, in the case of fishermen, etc., about $\frac{2}{15}$, and that in respect of other Hindus and Muhammadans, etc., $\frac{1}{200}$. As regards bhang, it is chiefly consumed by Hindustani sojourners and a few high-caste Hindus.

21. Generally ganja-smokers in this district do not make any difference between flat, round, and chur ganja; but I have heard some of them say that they would prefer flat ganja to round and round to chur, the first being, they say, quantity for quantity, more intoxicating than the second; and the second than the third.

22. Not used in this district.

23. Yes, but only by inveterate ganja-smokers when they have failed to procure ganja, which happens very rarely.

24. Bhang is not much used in this district. In the town of Chittagong sojourners from Behar and from other places higher up are the chief consumers. It is mostly drunk, and by high-caste people.

25. Charas is not used in this district. As regards ganja and bhang, they are neither on the increase nor on the decrease.

26. (a) 14 annas.

(b) 1 anna.

(c) 1 anna.

(d) Nil.

27. Habitual moderate consumers are mainly taken from fishermen, mehtars, Haris, coolies and palki-bearers; habitual excessive consumers from fakirs and sanyasis, and occasional moderate consumers from high-caste people. These remarks apply to ganja. As regards bhang, its use in this district is rather limited and is almost restricted to high-caste people. Fishermen, Haris following the profession of fishermen, coolies and palki-bearers smoke ganja in order to bear up the fatigue and to protect themselves from the consequences of exposure to weather—mehtars and Haris following the profession of mehtars, to enable them to carry on the work of cleansing latrines and similar work without a feeling of repulsion. Religious mendicants, i.e., fakirs, sanyasis, etc., smoke ganja partly to be able to bear up the fatigue and exposure to weather, and partly to concentrate their minds on the contemplation of the subject of their devotion when they address themselves to it.

28. (a) 3 annas in weight per head, costing 9 pie.

(b) 8 annas in weight per head, costing 2 annas.

29. Ordinarily nothing is mixed with ganja. After being washed with water it is placed in the hollow of the palm of one hand, kneaded, and then cut into pieces. The cutting and kneading are repeated three or four times, and the quid thus prepared is filled in a chillum and smoked. Exceptionally milk is used instead of water in washing the drug when the smoker is a rich man to make it more relishing. Dhatura seeds are mixed with ganja to make the smoke more intoxicating,

but this is seldom, if at all, practised. As regards bhang, ordinarily a few grains of aniseed are mixed with it and pounded, and the paste so prepared is diluted with water and then drunk. Exceptionally in the preparation of the paste, milk, sugar, cucumber seed and other spices besides aniseed, such as black pepper, cinnamon, nutmeg, etc., are made use of. Aniseed and cucumber seed make the drug cool, milk and the other spices make it refreshing and flavourous, and the sugar heightens the strength. I am not aware of any bhang massala being sold in this district.

30. Ganja is smoked mostly in company. Bhang, which is not much used here, is consumed mostly in solitude. Ganja and bhang are mainly confined to the male sex. The habit is contracted in the prime of life and is seldom given up. It is not usual for children to use either of these drugs.

31. I believe the habit is not easily formed; but, when once contracted, it is very hard to break off. In the case of persons who indulge in these drugs for the sake of pleasure there is a tendency for the moderate habit to develop into the excessive.

32. The Hindus make offering of ganja and bhang to Siva, one of the Trinity of the Hindu mythology, it being supposed that he is best pleased with such offering. Bhang drink is prepared with milk, sugar, and spices, and poured on the phallus, which is the emblem for Siva. Of the quantity prepared either the whole or a part of it is poured on it. In the latter case the quantity left unpoured is drunk by the offerers. There is also a religious custom among the Hindus to drink bhang on the following days:—

Navami or Bijaya Dashami day in connection with the worship of the goddess Durga in autumn; Sripanchami day in connection with the worship of the goddess Sharash-sati (Goddess of learning) in spring; Siva Chaturdashi day in connection with the worship of the god Siva in spring; Ram-navami day in connection with the celebration of the birthday of the god Rama.

The use of the drug is not essential. It is generally temperate. It is not likely to lead to the formation of the habit, and it is not injurious. It may be added here that most of the Hindus do not observe this.

In the district of Chittagong, and I believe elsewhere in Eastern Bengal, some Hindu ganja-smokers sometimes offer ganja to Trinath, or Lord of the Three Worlds, by which name they mean the Siva. A number of ganja-smokers occasionally sit together and fill a chillum with ganja prepared in the usual way, put fire on it, and after pronouncing a formula of prayer asking the God to accept of the offering, smoke it away. This, however, is neither a religious nor a social custom, but done only by a limited number of low-class ganja-smokers.

In the districts of Northern Bengal the ganja is offered to Siva represented in the form of sanyasi (the ascetic). When this is done by a non-smoker the chillum of ganja, after it has been offered to the God, is given to a smoker, when at hand, who smokes it. When the offerer happens to be a smoker, he smokes it himself. In the case of there being no smoker at hand the drug is left to be burnt on the spot. This does not lead to the formation of the habit.

33. Low-caste people whose occupations in life compel them to smoke ganja do not incur any odium, but it is reprehensible on the part of high-caste people or people occupying high rank in society. As regards bhang habitual drinkers are looked upon with scorn. The practice of using ganja or bhang is neither enjoined nor prohibited by religion, but society regards it in the light of evil. Excessive use of bhang impairs memory, and the use of ganja renders the consumer testy. I do not know if there is any custom of worshipping the hemp plant.

34. Ganja.—To forego the consumption of the drug, would be a serious privation in this district to the classes of people whose avocation in life compelled them to have recourse to it. It protects them from the cold, keeps them in good health and in cheerful spirits, enables them to bear up hunger and fatigue. As regards bhang.—In this district the bhang-drinkers are but few and they drink only occasionally, and therefore I do not think the foregoing it would be a privation.

35. I do not think it would be feasible to prohibit the use of ganja and bhang drugs, and I believe they will be illicitly consumed. Prohibition may be attempted to be enforced by stringent legislation and by raising the duty too high; but in either case such attempts I fear are bound to fail. The prohibition will create a serious discontent; but I do not think it can amount to a political danger. If the prohibition be attempted, then a few bhang-drinkers might have recourse to opium or to liquor, and some ganja-smokers to opium.

36. I have no reason to think that in this district alcohol is being substituted for ganja or for bhang.

38. No.

39. The smoking of ganja or bhang is more injurious than the eating or drinking of the same. Those that smoke ganja for the object of averting the inclemency of the weather and exposure to water do not experience the evil effects; but those that smoke it for pleasure become emaciated and lose their natural voice, and become also subject to various maladies.

40. Kabirajes (native physicians) use ganja and bhang in the preparation of medicines for loose-bowels, dyspepsia, diarrhoea, skin diseases, dysentery, pain and impotency. They are also used in tonic medicines. I am told that a medicinal preparation made up of ganja, bhang, and several other ingredients are administered to cattle when suffering from loose-bowels.

41. (a) Ganja and bhang are beneficial in their effects as digestives.

(b) They give staying-power under severe exertion or exposure and alleviate fatigue.

(c) and (d). Not known.

Fishermen, Haris, kahars, coolies, bearers, use ganja for the purposes mentioned in (b). I refer to moderate habitual use.

42. Notwithstanding the beneficial effects of ganja and bhang, as stated in answer to Question 41, the use of them cannot be pronounced to be harmless. Those that smoke ganja even moderately for pleasure's sake lose their memory more or less and become incapable of sustained mental labour. They also become weak, peevish, and sickly. Moderate bhang-drinkers also suffer from

impaired memory, though they preserve good health.

43. Yes.

44. The immediate effect of the moderate use of ganja is the partial obscuration of the vision, dryness of the throat, tongue and the lips and a feeling of drowsiness, which are followed by cheerfulness of spirit and a proneness to loquacity. It is somewhat refreshing and produces intoxication. It does not allay hunger. It creates appetite. The effect lasts three or four hours. The after-effects are languor and a longing for further gratification, and some uneasiness if the longing is not satisfied. Bhang does not produce instantaneous effect on the consumer. In about twenty to thirty minutes the consumer's throat, tongue, and lips begin to get dry, the eyes contract and turn somewhat dim. He becomes jolly and laughs often. It does not allay hunger, but produces a ravenous appetite. The effect lasts about twelve hours. The after-effect is a feeling of weakness and a depression of spirit. For a habitual consumer there is a longing for further gratification, but for one who takes it for the first time there is a feeling of dislike for it.

45. Ganja produces noxious effects, physical, mental, and moral, but bhang produces noxious effects, only mental. Ganja impairs the constitution, but bhang does not. Ganja or bhang does not injure the appetite. Ganja induces bronchitis and asthma as well as dysentery. Bhang does not do so. Ganja impairs moral sense and induces habits of immorality, but not so does the bhang. Ganja deadens the intellect, but does not produce insanity. Bhang does not produce insanity, but impairs the intellect a little. The evil effects of ganja do not operate on fishermen who use the drug moderately in pursuit of their callings. I do not know of any insane having no recorded ganja history confessing to the use of the drug.

46. Ganja produces all the noxious effects mentioned in Answer 45, and in addition, it is apt to induce insanity. Habitual excessive use of bhang does not produce any noxious effects on the consumers beyond what it produces on moderate consumption.

47 and 48. Habitual moderate as well as excessive use of ganja or bhang does not appear to me to be a hereditary habit, and does not affect in any way the children of the consumers.

49 and 50. It is said by many that some ganja-smokers make moderate or excessive use of ganja as an aphrodisiac, and that it is so used by some prostitutes. The use for this purpose must be more injurious, inasmuch as there is in this case the loss of vital fluid in addition, and the desire being very ardent, the loss the more. The habitual excessive use of ganja tends to produce impotence. I do not know of the bhang being used as an aphrodisiac.

51. (a) No.

(b) No connection.

52. Ditto.

53. Excessive indulgence may incite to unpremeditated crime. I know of no case in which it has led to temporary homicidal frenzy.

54. Not known in this district.

55. Not known in this district. Complete stupefaction can be induced by ganja without admixture when tried on a person unaccustomed to the drug.

56. The intoxicating power of ganja or bhang may be tempered by boiling the drug in milk, but this is not done by the consumers. The intoxicating power of ganja or bhang may be increased by the admixture of sugar, opium, pumpkin root, and dhatura seed. Sugar is often used in the preparation of the bhang by both moderate and excessive drinkers; but I have no personal knowledge of any consumer addicted to use ganja or bhang by admixture of the other ingredients. I know of no person using the admixture of dhatura for personal consumption or for administration to others.

57. I know nothing of this.

58 and 59. The present system of excise administration is working well.

60. Ganja is produced in the province; but having never been in the ganja-producing tract, I am not in a position from personal experience to answer this question.

61. Charas is not produced in this district, and I know nothing about it.

63 and 64. I have no objection.

65. I have no knowledge of charas; but I think the taxation of ganja and bhang with reference to each other and to alcoholic or other intoxicants is reasonable.

66. There should be, and in fact there exist at present, different rates of taxation for different kinds of ganja produced in Bengal. The rates are as follows:—

	Rs.	A.
Duty levied per seer of flat ganja	...	6 0
Ditto round do.	...	7 4
Ditto chur do.	...	8 0

The above rates of duty with reference to each are fair, seeing that one seer of flat ganja yields about twelve chittacks of ganja when separated from the woody portion, and one seer of round ganja produces about fourteen chittacks of ganja when separated from the woody portion, while one seer of chur or broken ganja yields one seer of ganja having no woody portion to be separated therefrom. It will thus be seen that the duty levied on ganja, whether in the shape of flat, round, or chur, really comes up to Rs. 8 per seer only; in the case of round ganja, annas 4 is charged in excess.

67. I have no objection as to ganja and bhang.

68. In this district there are shops licensed for the sale of ganja and bhang, but not for their preparations; neither are the drugs consumed on the premises. The shops are so situated that they very well meet the requirements of the consumers and have no objectionable features about them.

69. The wishes of the people are consulted before a shop is opened in any locality. Excise inspecting officer visits the locality, ascertains the fact whether the shop is needed, and whether the people of the locality have any objection to urge against its being opened. Local public opinion should be always considered before issuing a license for a shop.

70. There has been no case of importation or smuggling of hemp drugs from Native States into this district. I have no facts regarding the importation or smuggling of such drugs from such States into the province to which I wish to draw attention. In this district duty is really paid in respect to the ganja and bhang used. As far as I know, there is no use of untaxed drugs in this district.

49. *Evidence of* BABU BHAIKAB NATH PALIT, *Deputy Magistrate and Deputy Collector, Birbhum.*

1. Having had charge of the Excise Department in more districts than one, I had opportunities to collect information regarding hemp drugs.

2. The different sorts of the drugs are known here by their names as explained in their respective definitions, *viz.*, the dry leaves of the hemp plant are called siddhi or bhang; the resinous matter obtained from the hemp plant is charas, and the dried flowering tops of the same are known as ganja, transported from its producing districts, in three different forms, as flat, round and chur by which they are named here.

3 to 18. In this district there is no cultivation of the hemp plant, and I have no opportunities of staying in ganja-producing districts or subdivisions so as to acquaint myself with the method of its cultivation and growth.

19. Ganja and charas are wholly and solely used for smoking.

20. Generally five per cent. of lower and agricultural classes smoke ganja in almost every part of this district. The consumption of charas is very little, and needs no remarks.

21. Round ganja is preferred by its consumers in the localities extending over tracts of the Sadar Sub-Division consisting of Thanas Suri, Dubrajpur, Bolpur, Labpur, Sakulipur; while flat and chur are consumed in the Rampur Hat Sub-division, consisting of Thanas Rampur Hat, Monreswar and Nalhati.

22. Charas imported from Amritsar in Punjab is only used here.

23. Bhang is not used for smoking.

24. Bhang is chiefly used by up-country trading classes residing at Rampur Hat, Murarai, Nalhati, Sainthia, and Bolpur and Suri. The proportion of consumers does not come up to more than 1 per cent.

25. The use of ganja is increased in this district on account of high prices of country spirit. There is also a slight increase in consumption of charas and bhang, which does not call for remarks.

26. Among ganja-smokers there are:—

(a) $\frac{3}{4}$ of the consumers.

(b) $\frac{1}{4}$ „ „ „

(c) $\frac{1}{8}$ „ „ „

(d) $\frac{1}{8}$ „ „ „

Day-labourers and agriculturists are driven to its use in order to mitigate their daily labours, and religious mendicants betake to it to concentrate their minds towards devotion.

27. The consumers of ganja are chiefly day-labourers and agriculturists and religious mendicants, the latter being also drinkers of bhang.

28. Two pice worth of ganja per diem, on average, is consumed by—

(a) habitual moderate consumers.

(b) religious medicants, as much as they receive from their followers and other believers in their persuasion. There is no fixed ratio amongst them.

29. Tobacco leaves generally called “dokta” are ordinarily mixed in the preparation of ganja. In the decoction of bhang, small quantities of

pepper, aniseed, cucumber seed and sugar or molasses are used to enhance its stimulating effects. Dhatura is never heard to have been so mixed with these drugs.

30. Thirty per cent. of the consumers of ganja smoke in solitude, and the rest in company. Charas and bhang are in most cases used in company. The use of these drugs is mainly confined to male sex generally, from youth. In very rare cases they are used by children.

31. The habit of ganja-smoking is formed by frequenting or mixing in the company of the habitual consumers, and it is difficult to break off such habit, when once formed, when the consumer has been maturely formed. In few cases the moderate habit turns into excessive.

32. It is a custom throughout the district to use bhang on the Bijoya Dasami night in every household, such practice being considered religious, inasmuch as it is essential. It is always temperate, but does not lead to the formation of habit, or prove injurious.

33. Generally these drugs are regarded as intoxicating element; in some cases social, and in other religious.

34. The consumers of those drugs cannot forego the use of the same without some serious privation to their health, *i.e.*, loss of appetite and of active habits of their life.

35. I do not consider that the prohibition of these drugs, except charas, would be in any way feasible, since it would certainly lead to illicit consumption, and would create serious discontent amongst the consuming population, and such discontent may threaten afterwards breaches of the peace in the country. No alcoholic stimulants or other intoxicating drugs will, in my opinion, be adopted as substitute for these drugs by some classes of bigotted Hindus and Muhammadans.

36. I do not think alcohol is being taken recourse to in substitution of these drugs.

37. Ganja is more stimulant and much stronger in effect of intoxication than what can be obtained from charas, which is of moderate strength, and is used by youths of upper and middle classes of Hindus and Muhammadans.

38. There is no appreciable difference in effect of the three species of ganja, though people of some places prefer flat to round, and those of others round to flat, according to their climate.

39. Ganja is only used here for smoking, and is no way taken for the purpose of drinking or eating. Smoking of ganja or hemp plant is proportionately less injurious than the drinking of siddhi with preparation.

40. Siddhi is used in preparation of some native Ayurvedic medicines, *viz.*, kameswar madak, madanda ras, etc., in cases of impotence, sexual debility and the like. It is also said to be used in the treatment of cattle diseases. Ganja seeds are also used for like purposes.

41. (a) The moderate use of ganja or bhang gives much benefit to the digestive function of their respective consumers.

(b) It affords staying-power under severe exertion, or exposure, and alleviates fatigue.

(c) It proves a prevention of disease in malarious and unhealthy tracts.

42. Moderate use of these drugs is both beneficial and harmless, as their use lessens fatigue and thirst, and at the same time increases appetite and improves digestion.

43. In my opinion moderate consumers are inoffensive to their neighbours.

44. The habitual moderate consumers of all these drugs take them to give them stimulus in their day's work, and they feel their use refreshing during and after their labour. They do not produce any appreciable or harmful intoxication. They serve to create appetite, and have no after-effects on their habitual moderate consumers.

45. No such case comes to my notice, in which the habitual moderate use of ganja has produced any noxious effects. From enquiries I come to know that insanity is never produced by use of ganja in any shape, save and except the cases of eccentrics, who become insane when they use ganja in excessive quantity.

46. I am acquainted with some cases in which the habitual excessive and long-continued use of ganja produced dysentery, but the consumers who can afford to take milk are not affected with the disease.

47. I do not think the use of any of these drugs imparts any hereditary influence on the children of the consumers.

48. I don't know any case in which children of the excessive consumers of these drugs have been subjected to any specific disease or have necessarily inherited the habit of their fathers.

49. I have no doubt that moderate use of these drugs serves as an aphrodisiac to both sexes, and lower classes of prostitutes in rare cases use ganja as ordinary narcotic, instead of spirituous liquor. I do not think the use of ganja or siddhi tends to produce impotence.

50. The excessive use of any of these drugs has no such tendency to produce impotence.

51. The bad characters here are not, in general, habitual consumers of ganja.

52. No one of them is heard to be an excessive consumer.

53. No such case has come to notice in which by excessive use of these drugs any unpremeditated crime, violence, or homicide has been committed by their consumers.

54. In some rare cases of dacoity I heard the criminals used ganja before they set up for the purpose.

55. The criminals do not induce their victims to partake of these drugs to produce their stupor, with intent to facilitate their criminal action.

56. The smoking of ganja with tobacco leaves

Dhatura is generally used by thugs and dacoits for purposes of committing crimes of sorts; it is chiefly resorted to in North-Western Provinces and Punjab.

A. AHMAD,
Offg. Collector.

in moderation causes a mild intoxication, while its excessive use induces stupor and constipation. The effects of siddhi are almost similar. I have no information to lay down regarding the admixture of dhatura.

57. Ganja and charas are not drunk.

58. The present system of excise administration requires, in my opinion, some improvements in its working.

59. I would suggest that the improvements may be made—

I agree.

(a) by increasing taxation

A. AHMAD,
Offg. Collector.

(b) by modifications in the act of transport of these drugs from the producing districts.

(c) by having sufficient establishments to watch and regulate its consumption.

(d) by reducing the quantity for possession of these drugs, at present authorized by law.

This should be controlled in the same way as opium, and certainly supervised by the same Department.

60 to 62. I have no suggestion to make regarding the improvements by which cultivation or production of these drugs should be controlled.

63. I have no objection to the present system of retail vend of these drugs, except with regard to the quantity at present the retailers are authorized to sell. But I object to the present system of wholesale vend of these drugs, since it not only affords to the wholesale dealers all facilities to import bad drugs at low prices, but also induces them on many occasions to sell those drugs to retailers even when they are unfit for use. Moreover, it facilitates the wholesale dealers who hold retail shops to sell these drugs at cheap rates. The introduction of the proposed system will also sufficiently control the exorbitant charges obtained by wholesale dealers from retailers.

64. As I have stated above, I do not approve of the present system of export and import and transport of these drugs. I think in order to have a better control over the consumption of these drugs, the first thing will be to do away with the present system of the wholesale vend.

65. In my opinion the present taxation of these drugs is not sufficient in proportion to that of spirituous liquors and opium. The amount of taxation of these drugs should be raised to the following rates, viz.:—

Ganja, Rs. 4, exceeding the present rate on average.

Charas, Rs. 8, exceeding the present rate on average.

Siddhi, Re. 1, exceeding the present rate on average.

66. The rates therefore should be for flat with small twigs, and round Rs. 11

Chur „ 12

(Flat with large twigs should be done away with.)

67. If the above measures be adopted to enhance the taxation of ganja, charas and bhang, I think there will be no necessity to interfere with the present system of taxing these drugs.

68. In this district there are no such licensed houses or shops for the sale of these drugs where they are consumed on the premises, and it is not practicable to have any hold over the consumers in respect of inducing them to consume these drugs in the sale-rooms.

69. As a rule, the practice of consulting the wishes of people before a shop is granted in any locality is not now in vogue. When any such shop is in requisition in any locality, reports regarding the necessity, and the area, population, etc., are called for from the local Excise Officers, and they are considered by Excise Deputy Collector before proposing the same for settlement.

70. There has occurred no case of illicit importation of these drugs from Native States.

50. *Evidence of* BABU JOGENDRO NATH BANDYOPADHYA, *Brahmin, Deputy Magistrate and Deputy Collector, Jalpaiguri.*

1. I have derived my experience as the Excise Deputy Collector of the District and as a general enquirer of the subject.

2. These definitions can be accepted for this division—

Flat ganja is locally known as chipta ganja.

Round ganja is locally known as gol ganja.

Broken ganja is locally known as chur.

3. In Rajshahi, Bogra, Rangpur, and Dinajpur. It grows abundantly at Balighara in Bogra, Nao-gaon in Rajshahi and Mahadevpur in Dinajpur.

4. Bhang and ganja, and in some districts *banganja* or wild ganja, which is not cultivated, but has an indigenous growth.

5. It grows in temperate climate and moist soil.

6. It is ordinarily dense.

7. In Rajshahi, Bogra, and Dinajpur, special arrangement is made for the production of ganja.

9. Hemp is cultivated mostly on the principle of paddy cultivation, the small plants originally raised from seeds, but afterwards transplanted in rows similar to potato-rows. Free-watering is necessary to keep moisture which, communicated through the roots, promotes growth.

10. No. The agricultural cultivators generally cultivate hemp.

11. No; not in Bengal. It is sometimes the case in Orissa where a sort of hemp is cultivated for narcotic purposes called Gurjat ganja.

12. In Orissa.

13. Yes; it is restricted to parts of Dinajpur, Bogra, and Rajshahi districts only. Those districts have been selected, as hemp plant for ganja grows in abundance in the particular parts of those districts. If not restricted, its cultivation may be common to all districts of this division except Darjeeling, where its cultivation is impossible for its rocky soil and dry climate.

14. Yes; ganja plant only is prepared in the districts of Bogra, Rajshahi, and Dinajpur.

16. Yes; bhang can be and is prepared generally by the people in their houses from the indigenous hemp plant wherever grown.

17. There are no particular classes of the people who make the preparations of the hemp drug. Charas is neither made nor consumed in this district.

18. Yes. Bhang loses its effect in two years; ganja in four years, and charas in eight years. Exposure to moisture and damp causes deterioration. If these are kept in tin-clad chests, placed in well-ventilated room, it may prevent deterioration.

19. Yes; but the use of charas is not very prevalent in this division. It is only the lower classes of people that smoke ganja.

21. The chur ganja is generally preferred for smoking.

22. It is only the native charas, and that is very rarely used.

23. Yes; in the districts of Patna and Bhagalpur Divisions by Marwaris, Chamars, and other low up-country people.

24. Bhang is not generally used in this district,

25. The use of ganja is on the increase in this district, as it appears from the increase of its sale.

27. The agricultural people are the general consumers of ganja. They smoke the drug to shake off mental and physical depression caused by excess in labour and climatic influences.

29. Tobacco is generally used with ganja. Some spices, cardamom, cinnamon, black-pepper, sugar, and milk are ordinarily used with bhang, and this admixture is generally called siddhi. The object of such admixture seems to be to add to the narcotic powers of the respective drugs and to render the drink palatable and nourishing in respect of bhang or siddhi. Bhang massala is not prevalent here, and is not therefore sold in the bazar. A preparation like this is sold in the Patna and Bhagalpur Divisions consisting of nutmeg, cardamom, cinnamon, black pepper and other ingredients.

30. Ganja is smoked sometimes in solitude and sometimes in company as the opportunity occurs. It is mainly confined to the male sex. It is not usual for children to consume any of these drugs.

31. The habit is easily formed in the lower classes of people. It is not so much difficult to break off as in the case of opium. There is not a tendency in the case of any of these drugs for the moderate habit to develop into the excessive.

32. Siddhi in a sherbet form is used during the Durga puja, Kali puja, and some other minor pujas. This is regarded as essential. It is generally temperate. This is not likely to lead to the formation of a habit.

33. The ganja is almost universally smoked by sanyasis. They use it as helping meditation. It has therefore received a social and religious sanction in their case. But the use of these drugs is generally in disrepute, if used by people for the sake of intoxication.

34. It would be considered a serious privation by the lower classes of people and the sanyasis as they have been habituated to it, though for different objects.

35. It would be difficult to prohibit the use of ganja and siddhi, as these have some sort of social and religious sanction in case of certain sections of the community.

The drug is sometimes consumed illicitly.

The prohibition would occasion serious discontent among the consumers, but there would be no political danger.

36. In higher classes alcohol is now being, to a certain extent, substituted for ganja and charas.

38. There is no very appreciable difference in the effects in kind of the use of the three different preparations of ganja, but there is in degree. As chur is finer than the other sorts and round finer than flat, the intensity of intoxication increases with the increase of fineness.

39. The smoking of any preparation of the hemp plant is less injurious form of consumption than drinking or eating the same, or any other preparation, as there is the least assimilation of the drug with our system in the case of smoking.

40. Native doctors sometimes prescribe bhang as medicine. Ganja is used in the treatment of cattle disease.

41. Yes.

(a) Digestive.

(b) Gives staying-power under severe exertion or exposure and also alleviates fatigue.

(c) Preventive of disease in malarious and unhealthy tracts.

The agricultural people and the ascetic classes use the drug for the above purposes. I refer to the moderate habitual use of the drug.

42. Yes; for the reason stated in Answer 41.

43. Yes.

44. It is refreshing. Yes; it produces intoxication at first. It creates appetite. The want of subsequent gratification produces longing or uneasiness.

45. The habitual moderate use of any of the drugs produces, in some cases, noxious effects on our physical, mental or moral systems, but in the cases of the lower people and the sanyasis it does not. It slightly impairs the constitution in many cases. It sometimes injures digestion or causes loss of appetite. In some cases it causes dysentery, bronchitis, or asthma. It induces laziness, but does not impair moral sense or induce habits of immorality or debauchery. In some cases it deadens the intellect or produces insanity.

47. There are not numerous instances in which the habitual moderate use of these drugs appears to have descended to children.

51. A certain proportion of bad characters are habitual moderate consumers of these drugs, but the proportion is not very large.

52. But the persons, who are addicted to excessive use of any of these drugs, are generally of bad character.

53. An excessive indulgence in any of these drugs incites to unpremeditated crime, violent or otherwise.

54. Such examples are very rare.

55. In very rare cases, criminals induce their victims to partake of any of these drugs, and so stupefy themselves. A complete stupefaction cannot be induced unless dhatura is admixed with it.

58. An increase in the license fees may reduce consumption of the hemp drugs.

66. It is necessary that there should be different rates of taxation for different kinds of ganja as chur is better in quality than round or flat, and round is better than flat.

68. No.

69. In the case of an opening of a shop for selling these drugs, the wishes of the people are not consulted or considered at present. But in my opinion, local public opinion should be consulted and considered before a shop is opened.

70. There are no cases of importation or smuggling of hemp drugs from Native States into our Division. Duty is really paid in respect to the ganja and other hemp drugs used, but by the sellers directly and by the consumers indirectly. Untaxed drugs are not generally used.

51. *Evidence of BABU JAGA MOHAN BHATTACHARJYA, Deputy Magistrate and Deputy Collector and Personal Assistant to Commissioner, Chittagong.*

With remarks by Mr. W. B. Oldham, C. I. E., Commissioner of Chittagong.

1. I was Excise Inspector of the Dacca Division for five years, and Excise Deputy Collector for the same period at Burdwan and Monghyr.

(I have never had to specially study the ganja question.—W. O.)

2. Yes; the same local names as above.

3. In Dacca, Mymensingh, on the banks of rivers, and in Monghyr at the foot of the hills near Baha Chowki, a village about 14 miles from the town.

(Also in Chittagong, Chittagong Hill Tracts, Noakhali, Tippera and Hill Tippera. In the Darjeeling District it is abundant.—W. O.)

4. Siddhi and bhang plants.

5. Not known. But a damp soil apparently encourages the wild hemp.

(I have only seen it in valley and sub-montane tracts.—W. O.)

6. Generally dense.

7. (a) In Rajshahi.

8 to 11. Not known.

12. Not known.

(No. In Hill Tippera manufactured ganja is imported; also into the Hill Tracts where Hindustani workmen and artificers require it.—W. O.)

13. Yes, to Rajshahi. The rest not known to me.

14. Yes.

(a) In Rajshahi.

(c) In Monghyr to a large extent, most of the bhang consumed in the province being prepared there.

15. There is no particular method adopted in preparing bhang. The leaves are plucked and dried in the sun, and then stored as bhang.

16. Yes; in Dacca and Mymensingh the wild hemp plant is cut down and left on the thatch of the house to dry, and then kept stick and leaves together for use as bhang. I have seen wild ganja plants, but not in flower.

(I was told in Darjeeling that ganja could be prepared from the wild hemp, but the preparation was unattractive.—W. O.)

17. Not known.

18. Ganja and bhang deteriorate by keeping. I do not know anything about charas. They do not quite lose their properties. With ordinary care they keep good about two years. Damp is the cause of deterioration. This might be prevented by keeping the drugs in tin-lined boxes.

19. Yes; that is my experience.

20. In the districts where I served the use of charas was almost unknown. The majority smoked ganja.

(In the Sonthal Parganas the reformed or Hinduized Sonthals, who call themselves Kharwars and who eschew alcohol, have taken to ganja. In

Tippera, where the Muhammadans are strict fakirs, and so obliged to refrain from all intoxicants, ganja is largely consumed.—W. O.)

21. My experience is that tastes vary according to localities. In Burdwan and Monghyr the staple is round ganja. In East Bengal it was flat in my time.

22. Not known.

23. Yes; in Mymensingh and Dacca to a very small extent by the lowest classes as a substitute for ganja.

24. Up-country men living in Bengal use bhang as a drink largely.

25. Is stationary. The fluctuations are casual.

26. (a) About 90 per cent. ganja smokers.

(b) About 10 per cent.

(c) As regards bhang, moderation is the rule, and I have never come across a case of excess.

27. The working classes, the cultivating classes, boatmen, and fishermen.

Hard work and aquatic habits lead to the practice. In Dacca the weaver class, which is a wealthy one, generally smoke ganja.

The sanyasis all over the country are addicted to the excessive use of ganja. It is said to protect them from the effects of exposure.

(It is taken as a prophylactic to fever by people who have to work in the wet.—W. O.)

28. (a) One pice worth of ganja generally, from one-twelfth to one-sixteenth of a tola.

(b) About four to five times this cost and quantity.

29. Black pepper is pounded with bhang, and drunk in a solution of sugar.

30. Ganja is often smoked in company. Bhang also during the Durga Puja. It is confined to the male sex. But prostitutes in East Bengal do smoke ganja, and children very rarely.

31. (a) and (b) Ganja smoking is easily formed, and it is difficult to break it off.

(c) No.

32. In East Bengal, on the occasion of the puja of Trinath, ganja smoking is considered essential, and is sometimes excessive. Confirmed smokers generally congregate. Their example might prove injurious. Bhang is drunk during the Durga Puja on the Nahami day.

33. Bhang is not in disrepute, though ganja smoking is. Ganja smoker, like opium eater, is a term of opprobrium. I am not aware of any particular basis for this sentiment, except that it is an opinion handed down from father to son, and people seldom analyse it. I am not aware of any custom sanctioning the worship of the plant.

34. Yes, as the giving up of all confirmed habits. The prevention, however, as in the case of tobacco smokers, will be felt as a temporary suffering. With a large number of consumers, the use of ganja is not a daily habit, and the restraints of self-denial will ultimately prevail with them. In the matter of creating a powerful craving ganja is much inferior to opium, but in cases where it has been generated the privation will be surely felt. There would be about 10 per cent. of these.

35. (a) and (c) Yes; ganja and charas by prohibiting cultivation, but not bhang, which grows abundantly in a wild state in several districts.

(b) It would not be easy at all to consume ganja illicitly, for a plant could not be cultivated with anything like the secrecy with which distillation of liquor can be managed.

(d) Certainly for a time like the discontent caused by the abolition of the outstill system, and to a greater extent.

(e) In no way.

(f) Yes, in the cases of persons who cannot get on without some sort of stimulant.

(I concur. I supply ganja to our Hindustani artificers in the Lushai Hills.—W. O.)

36. Not to my knowledge, but many people use both.

37. I know almost nothing about charas.

38. Chur, being the droppings of the flower, does not contain so much of the resinous matter as the other two kinds do, and is consequently not quite so strong.

39. The drinking of bhang is popularly believed to be less injurious than ganja smoking.

40. (a) I am not aware of ganja being used by native doctors. In dysentery bhang is prescribed.

(b) In East Bengal bhang is also used in treating the bovine species, and in Burdwan it was habitually given to the Raj Bari elephants as a tonic.

41. (a) Bhang is used as a digestive, or at least an appetiser.

(b) and (c) Ganja is so used.

Well-to-do Beharis use bhang in the way indicated, and fishermen, boatmen, palki-bearers, and coolies in the way indicated in (b) and (c).

(Vide my note to question 35, which shows that we find it beneficial in the circumstances.—W. O.)

42. Apparently harmless, because consumers of this class look quite healthy and robust. But medical experts only can tell whether moderate, but habitual, use ultimately tells upon the constitution.

43. Yes.

44. In the case of those who use ganja and bhang moderately, it is refreshing and exhilarating, and the latter creates appetite. The effect would last for an hour or so, and is followed by a slight depression, which passes off quickly without causing any uneasiness.

45. I am not in a position to answer these questions, as I had no occasion to watch any consumer of the kind referred to.

(Of the mad men whom I have found confined for examination in jails, the madness of, I think, nine out of ten was attributed to ganja. Vide also my note on question 20. We certainly thought that it emboldened and made more reckless and troublesome the Kharwar Sonthals who were sometimes very troublesome.—W. O.)

46. I have seen half-witted people, who are hard ganja smokers; and evidently the weakness of the brain had been brought on by excess.

47 and 48. I have no knowledge on this point, though heredity in this respect also is quite possible. There is always the strong inducement of example.

49. (a) Not that I know of.

(b) Prostitutes use these as cheap intoxicants.

(d) Opium is said to induce impotence, but not hemp.

50. Ditto.

51. (a) Yes, in the sense that there is a large proportion of bad characters in the poorer classes who are the majority using these drugs, especially ganja.

(b) None that I know.

(Vide my notes to questions 20 and 45 as regards political offences.—W. O.)

52. Pilfering is associated with excessive use of ganja and opium.

53. Not to my personal knowledge. But excessive ganja smoking certainly weakens the brain, and may thereby lead to crime.

54. Kali Puja and ganja smoking are said to be the indispensable preliminaries of a dacoity.

55. I am not aware of such cases.

(I have known many cases of drugging, but none in which ganja was used. Dhatura was the ordinary agent.—W. O.)

56. I am not aware that anything is mixed with ganja or charas and smoked. In the drink prepared from bhang, sugar is added to fortify it. The admixture of dhatura is not known to me.

57. Not known to me.

58. Yes; it is working well.

60 and 61. I do not know much about the practical working of the rules controlling its cultivation.

62. The cultivation of bhang could only be controlled if the wild plant could be entirely suppressed. But this is not feasible.

63 and 64. None.

65. Yes.

66. Yes, because the quantity of ganja in the three kinds varies. There is a large quantity of sticks in the flat, less in the round, and it is entirely absent from chur.

67. No.

68. Yes. But ganja, unlike chandu and madak, is not generally smoked on the premises and there is nothing objectionable about the shops.

69. Ganja shops are never considered a nuisance and no one even objects to the site. Public opinion is never hostile to these shops, and therefore it is never consulted.

70. There are no facts regarding the importation or smuggling of ganja from Native States. Yes, duty is paid. There is no general use of untaxed drugs.

(I have made close enquiry about this. We have no reason whatever for thinking that untaxed ganja is used: nor in Darjeeling, where the wild cannabis is so abundant, was a case ever detected.—W. O.)

52. Evidence of BABU MANMOHAN CHAKRAVARTI, Deputy Magistrate and Deputy Collector, Jajpur, Cuttack, Orissa.

1. I was Excise Deputy Collector of the District Puri for more than two years, and since then I have been in charge of Jajpur Sub-Division, District Cuttack. The frontier of both the districts marches with those of many Tributary States, and for the last four years I have had to watch the smuggling of Gurjat ganja into these two districts. While at Puri I made special enquiries about the use and import of Gurjat ganja into that district. I know the people of Orissa pretty well. I was bred up here, and my entire period of service has been spent here. My remarks are to be taken as chiefly applicable to Orissa.

2. Patti (from Uriya pattar)—correctly defined.
Charas—Not used in Orissa.

Ganja is of two kinds—(1) Rajshahi, (2) Gurjat.

(1) Generally round, occasionally flat, Rajshahi ganja is imported. All the bundles contain seeds showing that the male plants have not been completely extirpated.

(2) Gurjat ganja consists of the dried flower-heads, male and female, mixed with leaves at the base of those heads.

Cannabis sativa of the tribe III *Cannabineae*
Natural order *Urticaceae* (Hooker's *Flora Indica*, Vol. V, page 487).

3. Hemp plant does not grow spontaneously in the regulation districts. I hear from traders and several Gurjat residents that hemp often grows spontaneously in the Tributary States of Mohurbhunji, Keonjhar, Dhenkanal, Boud and Atbmalik.

7. The cultivation of hemp plant is prohibited in the regulation districts of Orissa. In the

Gurjats many people grow this plant, both for bhang and ganja.

8. For several years the cultivation of Gurjat ganja was prohibited in the Tributary States of Orissa. This prohibition has been lately withdrawn, and I believe the area under cultivation has considerably increased. To what precise extent it has increased, I am unable to say.

10. I speak here of Gurjat ganja. The seeds are sown just before or at the beginning of the rains. If the lands be small, the seeds are sown broadcast; if the lands be large, the seeds are first sown in a nursery plot. After a month or so, the young plants are transplanted and put into the ground. When the plants are two to three feet high, the base of the stem is pierced and a piece of pebble or khapra (broken bit of earthen pot) put in. This, it is said, prevents over-vegetation and hastens flowering. The plant flowers in the beginning of winter (October—November). To prevent overbranching of the flower-heads, they are roughly twisted. The flowers begin to seed in mid-winter (December—January). So in December the flower-heads with a few base leaves are cut and dried, and when for sale, are sent in bundles.

13. See answer to question 7.

Ganja requires a cool moist climate for its growth. For the development of its flower-heads some amount of cold too is necessary. Hence most ganja plants in the plains do not ordinarily flower.

14 and 15. I notice the products under Chapter V.

16. (a) Yes.

(b) Yes.

(c) Not necessarily.

18. All the three drugs deteriorate by keeping. Bhang loses its effect in a day or two. It can be kept for twelve to twenty-four hours by covering and keeping it cool.

Ganja loses its effect in time—six to twenty-four months. Dampness is its chief enemy. The flower-heads are attacked by a fungoid growth and by white insects; while the patti is attacked by a whitish insect with reddish tinge. The more carefully the bales are packed, and the less they are exposed, the longer will their intoxicating effects remain.

19. Charas not used in Orissa. Ganja is chiefly used for smoking. Sometimes it is taken in the shape of madaks or balls, mixed with flour and sugar. It is so used only by well-to-do persons, being more palatable.

20. Ganja is smoked habitually by sanyasis and vaishnavas; and occasionally by goalas (cowkeepers) and bearers, manjhis (boatmen and fishermen), and chasas (agricultural class). It is difficult to state the proportion. It probably does not exceed one-half per cent. of the population of Orissa including the Tributary States. The ascetic classes chiefly congregate at the town of Puri. The other classes spread over the whole province.

21. In the regulation districts, round ganja, and rarely flat ganja. In the Gurjats, Gurjat ganja almost exclusively.

24. The Brahmin sabbaks of the temples in Puri, Jajpur and Bhuvaneswar, commonly called Pandas, and their agents known as pilgrim hunters, habitually drink bhang. Their number would be within two thousand. The higher castes, such as the other sub-classes of Brahmins, the Karans and the Khandaits, drink bhang occasionally, chiefly in summer as a cooling draught. Such occasional consumers do not exceed probably ten thousand.

25. The use of bhang has considerably decreased, and the ganja-smoking seems to have increased.

In old days, bhang alone was recognised in the Hindu Shastras, and in only one Tantra have I found mention of ganja-smoking (see appendix for quotations). The result was that the sanyasis, vaishnavas, and tantriks then chiefly drank bhang. With the later Muhammadan rule, tobacco-smoking and analogically ganja-smoking came into vogue. The power of ganja-smoking in hardening the body and in lessening the nervous sensibilities including hunger, endeared the habit to ascetics and persons compelled to do hard work under exposure. Thus ganja-smoking has more and more superseded bhang-drinking.

26. See answers to questions 20 and 24.

28. Moderate consumers of
ganja $\frac{1}{4}$ th to $\frac{1}{2}$ tola.
Cost in Rajshahi ganja 2 to 8 pice.
Cost in Gurjat $\frac{1}{2}$ to 4 pice.
Moderate consumers of
bhanga $\frac{1}{2}$ to 3 or 4 tolas.
Cost in Rajshahi $\frac{1}{2}$ to 2 pice.
Cost in Gurjat $\frac{1}{4}$ to 1 pice.
Excessive consumers of
ganja $\frac{1}{2}$ to 4 tolas.
Cost in Rajshahi 2 to 16 annas.
Cost in Gurjat 1 to 8 annas.
Excessive consumers of
bhanga 4 to 15 tolas.
Cost in Rajshahi 2 to 12 or 16 pice.
Cost in Gurjat 1 to 8 pice.

29. Ganja (Rajshahi or Gurjat) is ordinarily mixed with tobacco leaves and rubbed on the hand before smoking. Smoked unmixed, ganja produces cough and irritates the throat; and its effect is said not to last long; exceptionally is mixed with dhatura, to increase intoxication; or with musk, attar, sandal powder, and small cardamoms, to give fragrance to the smoke.

Bhang (Rajshahi or Gurjat).—Patti ordinarily washed, and then mixed with water. The decoction is then strained, and the strained liquid mixed with poppy-seed, small and large cardamoms, jayitri and pudina leaves, to give flavour; exceptionally milk or sugarcane juice or sugar added, to make the drink palatable. Sugar is also said to add to the intoxicating effects.

Bhang massala is sold only at Puri. It consists of poppy-seeds, pollens of nageswar flowers, and spices such as labong, jayitri and marich.

When the person is suffering from cold or cough, he often takes patti in balls of mashed leaves, called lubdhi.

In feverish state attended with cold, the bhang-drinker sometimes takes phanki. This consists of patti, fried in ghi, and then powdered with sunth, peepul, marich and saindhab salt.

30. Bhang or ganja taken sometimes alone, but generally in company. The bhang is drunk both by children and adults; ganja smoked chiefly by adults. Both confined to males only.

31. Yes; not so difficult to break off as opium, but more difficult to break off than is tobacco. Yes; there is a tendency to develop into the excessive, unless the consumer is a person of strong will, or is restrained by his pecuniary resources.

32. (a) In the following, bhang is customarily taken :—

- (1) On the night of Dasahra, bhang is prepared and drunk by relatives and friends; hence the day is probably called Bijaya, Bijaya being another name for hemp in Sanskrit.
- (2) On the Ganesh Chaturthi day, sweetmeats containing patti are offered to the god, and then taken by relatives and friends.
- (3) According to the Tantras, bhang should be drunk before several important ceremonies are performed (for quotations see the appendix paper).

(b) In the following, ganja is smoked :—

- (1) The yogis, sanyasis and vaishnavas consider smoking to be a part of their rites;
- (2) In a ceremony lately introduced into Balasore and Cuttack from Bengal, called Trinath-mela, one pice worth ganja should be smoked

Generally, excepting (b) (1), the drug is taken moderately; but the custom may, in some cases, lead to the formation of the habit.

33. Bhang-drinking, occasionally, is not in disrepute. But the habitual drinker is in bad odour. There is an Uriya proverb :—

“An opium eater is a thief, a ganja-drinker is tipsy (incapable of acting reasonably), while an user of dried tobacco leaves has too much golmal in his house (every body asking for some more leaves).”

Ganja-smoking is held more disreputable than bhang-drinking, and a "habitual smoker of ganja" is a term of abuse in Uriya.

34. For the habitual smoker or drinker, the prohibition would be a serious privation for several days. This is due to the force of habit, particularly habits in intoxicating drugs. For number see answers to questions 20 and 24.

35. In Orissa, Gurjat ganja was prohibited for nearly ten years, and numerous persons were convicted, often heavily punished. But still the use of the drug could not be rooted out. Illicit importation was frequent, and is still going on from the adjoining Tributary States. If the use of the drugs be prohibited, and a sufficient staff be kept for watching, the occasional consumers mostly, and the habitual consumers largely, will give up the habit. The staff will have to watch chiefly along the western frontiers of Orissa. The prohibition would give rise to much discontent, but I do not think it would lead to any political danger. The bulk of the habitual ganja-smokers and drinkers are not in so good repute as to move the general people. The prohibition may lead, in several cases, to the adoption of opium, but not certainly to alcoholic stimulants.

36. No; on the other hand, the high price of distillery liquors, and the rising price of toddy, have led several consumers to have recourse to ganja and opium; the lower classes using ganja, and the upper classes, opium. I noticed this particularly in Puri District.

37. I speak with some diffidence on the questions of this chapter. I am a layman and cannot speak so fully and correctly as a medical expert.

40. Yes; a horse, after a bath, is sometimes given a pill consisting of patti, turmeric and molasses.

41. (a) Bhang in moderate quantities is digestive, acting as a cooling beverage in summer

(b) Both bhang and ganja-smoking alleviate fatigue; ganja-smoking generally deadens the sensibilities, and thus enables a man to bear cold or heat, or to do hard continuous work for a time.

(c) In Puri and the adjoining saliferous tracts bhang is believed to prevent the formation of mucus and dysentery.

For the reasons (a) and (c) the Sebak Brahmins drink bhang. For the reasons in (b), bearers, boatmen and agriculturists smoke ganja.

I refer to moderate occasional use, except that in (c) moderate habitual use is believed to act as preventive of dysentery and diarrhoea.

43. Generally so; ganja-smoking often leads to an irritable temper, and the smoker is said to have an irritable temper.

44. Bhang.—Intoxicating, creates appetite, lasts from one to twelve hours according to constitution and quantity taken. The after-effects are uneasiness, and redness of the eyes.

Ganja smoking.—Refreshes after fatigue, intoxicates, takes away hunger, lasts for one-half to three hours. The after-effects are redness of the eyes and looseness of the bowels. After the intoxication is over, the mind has a craving for fresh drink or fresh ganja; and if not gratified, feels pain and uneasiness.

45. (a) Yes; so far as I know.

(c), (d) and (e) Ganja-smoking causes gradually a loss of appetite with dysentery. It certainly impairs the moral sense.

(f) This is difficult to state. The general belief is that ganja-smoking produces insanity. But I do not know personally of any case in which insanity has been so caused.

Bhang-drinking is much less injurious than ganja-smoking. Habitually taken, it injures digestion, and induces laziness; often it leads to habits of immorality.

46. All the above effects are intensified in the case of habitually excessive consumers.

49. Yes; bhang-drinking. Native physicians use patti in pills, meant for use as aphrodisiacs.

58. The policy of "minimum of consumption and maximum of revenue" adopted by the Excise Department of Bengal is working well. The arrangements are not, however, so perfect as to be incapable of further improvement.

59. For my suggestions, see appendix paper (B).

Appendix paper.

(A)

CHAPTER V, QUESTIONS 25 AND 32.

The general impression is that ganja was used as drug from time immemorial. To verify this I have looked up old Sanskrit works, and asked several Pundits to assist me. I could not find any mention of hemp as drug in any of the Vedic treatises at hand. Charak and Susruta are the oldest writers on Hindu medicines, whose treatises have come up to this date. I could not find any trace of ganja in the works of either. Dr. Watt in his recent dictionary makes a quotation in which Susruta is described as having prescribed ganja for affections of phlegm. But as neither the chapter nor verse is quoted therein, I am unable to test its accuracy.

The earliest mention of ganja as a drug is to be found in the Tantrik works. Ganja is there known as samvidya or vijaya. The Tantras prescribe two ceremonies, samvidya prakarana and vijaya-dhuma-panam. While describing them, the works give several details about the preparations and effects of ganja which may prove interesting to outsiders.

Translation—

Flowers (of hemp) are of four kinds: white, blood red, black and yellow. The white flower is the Brahmin woman; red, Kshatriya woman; yellow, Vaisya woman; and black, the Sudra woman. Gather the leaves (of ganja) carefully with seeds, fry them in ghi (clarified butter), powder the same on stones; then take trikatu (sunth, peepulli and marich), triphala (haritaki, bayera and amalaki), sringgi, kudha, dhane, saindhab salt, sati, the leaf of talis, katuka, nageswar, two kinds of juani (juani and agamoda), methi and two kinds of jira (jira and black jira); all these in equal quantities take, dry in the sun, and then powder; mix the powder of the ganja with this powder in a golden vessel, and then holding the hands over the mixture, consecrate the same with the following four mantras. (Here follow the mantras).

For the effects of the drug when taken in mixture, the following will suffice:—

Translation—

With milk, water, ghi, honey products (such as honey, wine, etc.), saindhab salt, sugar or molasses, or with ripe sweet fruits, such as

plantains, mangoes, jacks, etc., vijaya (ganja) can give power to do all acts. Taken with milk, vijaya gives all sorts of pleasures, is strongly stimulating, and prevents eye diseases. Taken with water, it removes indigestion. Taken with ghi (clarified butter), it strengthens memory, helps in subduing the goddess of speech, raises the fallen, and clears the intellect. Taken with honey, it cures all sorts of bodily illnesses. Taken with saindhab salt, it increases the fire of appetite. Taken with sugar or molasses, it removes stomachic spasms springing from acid-bile (amlapitta) humour, allays diarrhoea, puts a stop to cough and asthma, and prevents chronic dysentery rising from ambat.

etc., etc., etc., etc., etc.

For ganja-smoking, the only reference found is quoted below:—

Translation—

Or in another way the pangs of hunger may be stopped. The Joga master and mantra-knower, who daily smokes ganja through his brahmanandhra (higher orifice), is sure to get his hunger stopped.

For other references in the tantras, see Mahanirvana tantra, fifth ullasa, and Mundamala tantra.

The dates of these tantric works are not known. Tantric worship is a development of Sivaism and yoga and is a very late phase of Hinduism. It became prevalent after the Pauranic worship, and the tenth century A.D. would be rather an early date. From the composition and contents of these Tantras, I would put their probable dates at eleventh and twelfth centuries A.D. The extant writing about the use of ganja as an intoxicating drug might therefore be put at the eleventh century A.D.

The next authentic mention is in Bhabaprakash. This medical treatise was composed by one Bhaba Misra, a physician of North-Western Provinces, who flourished probably in the beginning of Akbar's reign. He says:—

Translation—

(The other synonyms of) bhanga (are) ganja, matulani, madini, vijaya and jaya. Bhanga removes cough, is bitter, astringent, digestive, light, sharp, hot, secretes biles, creates insensibility, intoxicates and increases appetite

In the later medical works, ganja and patti are often mentioned. The most detailed description is given in Binod Lal Sen Gupta's Ayurveda bijnan, drabyasthan, page 67.

Appendix paper.

(B)

CHAPTER VII, QUESTION 59, et seq.

I begin with the premise that no people or class of people can be made virtuous by law or orders of the authorities. An evil habit once come into vogue cannot be easily eradicated. By judicious repression and punishment, it may cease to be prevalent: but this requires time, and the gradual education of the bulk of the people. Even then no evil habit can be altogether extirpated—witness thefts, dacoities, murders and arson. In spite of the stringency of the Penal Code, of the strong horror of the public opinion, and of the vigilance of police, they have not ceased in any

country. Similarly with the habits of ganja-smoking and bhang drinking.

2. My next premise is that ganja-smoking is far worse than bhang-drinking. Patti is not unlike tobacco leaves, and may be placed nearly in the same category. Bhang-drinking is also enjoined by custom and the shastras in various ceremonies. Consequently the sale of patti is permissible like tobacco.

On the other hand ganja-smoking, even in small quantities, is injurious, and if habitually used, permanently injures the constitution, and affects the moral conduct. The sale of ganja should therefore be more and more restricted with an eye eventually to its total prohibition, except for medicinal purposes.

3. The sale of ganja may be restricted in three ways:—

1st, by restricting the cultivation to a small area. In Orissa, ganja cultivation is not allowed, so I need not speak anything. In the Tributary States, ganja cultivation is free; this I will deal with later on.

2nd, by raising the duty per seer of the ganja. At present the duty is Rs 6-3 on round ganja, and Rs 3-8 on Gurjat ganja. In comparison with opium, which has a duty of Rs 32 in Orissa, the above duty is less. It can be gradually raised to Rs 20 and Rs 10, respectively. For patti the present duty is annas 8 per seer. It can be raised to Rs 1, but not more, as patti cannot be kept long.

3rd, by increasing gradually the license fees of the shops, and by locating the shops in retired places. The increase in the license fees will chiefly depend on the consumption of the drug, and the distance from the frontier, etc. I am in favour of putting a maximum consumption for each shop, beyond which the shopkeeper will not be allowed to sell in every month. Except near the frontier, I do not see why it shall not be practicable. The shops for ganja, at least, should not be placed in prominent sites, such as hâts, bazars, public places, temples, fairs, etc., where the people may be tempted. The principle of local option is not bad, but in Orissa there is hardly any public opinion. In Municipalities the opinion of the Municipal Commissioners might be taken before opening any shop on a new site.

4. All the above suggestions, if adopted, will increase the retail price of the drugs. Patti and ganja will become more and more valuable, and smuggling will be attempted. The Tributary States in Orissa are too close, and smuggling will not be difficult. This can be checked in the following manner:—

1st, the ordinary detective staff of the district should be strengthened. The easiest way of doing this is to amalgamate the present detective staff of the Salt Department with the present staff of the Excise Department. The same area is often inspected by Salt Officers and by Excise Officers, but this work can be readily done by one officer.

2nd, at least one officer on a competent pay should be placed along the frontier of each district. He will have to move along the border making rapid marches, and inspecting the adjoining shops, and detecting smuggled drugs.

3rd, the Chiefs of the Tributary States are to be induced to reorganise their Excise Establishment (at present miserably kept), to restrict the indiscriminate cultivation of the plant, and to prohibit sales except under certain conditions. I am generally unwilling to make any suggestions about interfering with the liberty of action allowed to the Gurjat chiefs. But on moral grounds, for the benefit of their own people at least they might do so. Failing that, they may be persuaded to make over the Excise Administration in their territories to British Government, in consideration of annual grants. In Bombay Presidency this has been done and with apparent success.

5. I have no doubt that these arrangements, modified according to circumstances, will, in the long run, prove successful in Orissa. The changes, however, should be gradual; and the ill-success of a year or two's experiments should not discourage.

Oral evidence.

Question 1.—I have been eight and a half years in Government service. I have been Deputy Collector since 1886. When I was at Puri in charge of excise I made excursions into the Tributary State of Ranpur to enquire into the transport of outstill liquor and ganja. I went a short distance over the border for two or three days at a time and once to the head-quarters of the State.

Question 3.—When I went into the Ranpur State it was the end of November, and the ganja plants, many of which I saw, were about to flower. At that time the export of ganja into Orissa was prohibited.

Question 8.—The prohibition of cultivation in the Tributary States was by order of the Superin-

tendent of Tributary Mahals. I know it was prohibited in Ranpur, but cannot speak with certainty of other States. Ranpur was not under the Court of Wards then, i.e., in the year 1889.

Question 25.—I cannot say whether the actual quantity of ganja consumed is increasing. My answer only makes a comparison between the use of bhang and ganja. It is difficult to say if the total quantity of bhang and ganja consumed is increasing or decreasing, but my impression is that it is decreasing. This does not apply to the Balasore district, of which I have no knowledge, but to Puri and Cuttack only.

Question 45.—In Puri both Gurjat and Rajshahi ganja are consumed, but among the Panda class the Gurjat ganja is much more largely used in the shape of bhang, which is made of patti with a few ganja heads put in and drunk with spices. The drug is only eaten occasionally, and generally as medicine. The bairagies, vaishnavas, ascetics, bearers, and many others smoke ganja.

I have constantly been coming across people who drink bhang or smoke ganja. Palki-bearers smoke ganja, and work the better for it. The ascetics who visit Jagannath also smoke ganja, and appear to be rendered insensible to heat and cold thereby. I have never seen any consequences of taking the drug in crime, though the moral senses seemed to be impaired in some cases.

Question 70.—The Gurjat ganja was largely smuggled both from the Tributary States and the Madras frontier. I have recollection of a case in which the drug was smuggled between the two coverings of a native umbrella. The contrivances for smuggling are various. Smuggled ganja is not sold openly in the town, but distributed secretly among the consumers. The license fees for vend of ganja have nevertheless been increasing in the town of Puri.

53. Evidence of BABU NAVAKUMAR CHAKRAVARTI, Brahmin, Deputy Magistrate and Deputy Collector, Jangipur, Murshidabad.

1. I was manager of a private estate in Goalpara, and had to mix constantly with the people, specially the aboriginal tribes. I was head clerk with the Excise Commission of 1883, and as such visited the following districts with the Commission:—Gaya, Patna, Shahabad, Muzaffarpur, Bhagalpur, Monghyr, Malda, and Darjeeling. I was Excise Deputy Collector in Bhagalpur from September 1885 to August 1891, and had to move constantly in the interior of that district. I had also to visit Monghyr on excise purposes, and had occasion to move in that district while in charge of excise in Bhagalpur. I am in charge of Jangipur sub-division in Murshidabad since September 1891. In the above capacities I had opportunities to see and learn the excise matters of the country. In answering the questions I shall confine myself chiefly to my experience in Bhagalpur.

2. The definitions are correct, save that the class of ganja called "round" consists of two sub-classes:—

- (a) when branches smaller than those in "flat" kind are cut off and the flower tops are flattened;
- (b) when the mere flower-tops without any portion of branch are rolled as described by Dr. Prain.

In sub-class (a) the branches are from eight to twelve inches long, and this class of "round" is in use in Bhagalpur.

Sub-class (b) is not liked at all by the smokers there, as they say that it turns their head and makes them feel giddy.

3. Bhang grows spontaneously in Bhagalpur and Monghyr. It is also abundant in these two districts, which chiefly export to Calcutta. Bhang grows spontaneously in almost all the districts I have seen, but it is very limited in such places.

5. In Bhagalpur the most luxuriant growth of bhang is in the North Gangetic tract, where the climate is somewhat damp, like that in Lower Bengal, and the soil is sandy. The places inundated by the Kosi and the Ganges grow abundant and splendid plants. I have no knowledge on the effect of rainfall for its growth.

6. As dense as an excellent mustard crop. In places where the soil is less sandy, the density diminishes.

7. Bhang plants are not cultivated. Ganja is cultivated in Naogaon in Rajshahi.

10. Ordinary agricultural cultivators collect the bhang leaves.

14. Bhang is prepared in Bhagalpur and Monghyr.

In Bhagalpur it is annually collected from three to five hundred maunds, in Thana Bihipur and Kisanganj.

15. The wild grown bhang plants are cut and spread in the sun. The leaves are separated and

broken to pieces. They are then husked by females. This much is done on the spot, and then the leaves are put in bags, which are brought and stored in licensed warehouses at head-quarters. This method of preparation of bhang from wild plants is for drinking purposes, and is very simple and cheap.

16. I have seen bhang being prepared generally on threshing ground called "khaliau." It can also be prepared in houses, *i.e.*, *baris*. Bhang can be prepared from hemp plants wherever grown, but bhang of certain places is preferred, *e.g.*, bhang of Thana Bihipur is said to be preferred to that of other places in Bhagalpur. I am not aware of any particular reason for this. The bhang goladars of Calcutta importing from Bhagalpur may be aware of such reason.

I have seen ganja plants detected in Bhagalpur and Jangipur. From their twigs ganja as good in appearance as in Naogaon (the particular subdivision where ganja is cultivated under Government supervision) can be prepared, but it is alleged that the flavour is not so good as in those grown in Naogaon.

18. I speak of ganja and bhang alone in replying to this question.

Both ganja and bhang deteriorate by keeping. Both lose their effect in time. Ganja is kept good for two years in tin-lined wooden boxes; on the third year too it can be sold for its purpose with diminished intoxicating power. After that no smoker considers it worth while to purchase. On the third year it produces something like powder, there being no cohesive resinous matter, which shows that it has deteriorated. Bhang is generally kept in gunny bags and keeps good for three or four years. I am not sure for how many years it is kept good in Lower Bengal. But I am aware that old bhang of six or seven years' standing is used for medical purposes. Any inordinate exposure to heat, air, and moisture deteriorates ganja as well as bhang. Air-tight boxes like those intended for keeping stamps in treasures may enhance the period; but I think to prevent deterioration completely is impracticable, as the manipulation of ganja and bhang must expose the same to air and heat.

19. Ganja and charas, so far as I am aware, are used only for smoking.

20. In answering the question, I speak of ganja alone.

In North Gangetic Bhagalpur the Goalas abound, and they are hard, constant, and chief consumers of ganja. Next to them stand, I believe, the Rajputs. In South Gangetic Bhagalpur the Goalas are hard drinkers of country-spirit and not of ganja at all. The Rajputs are the same all over the district. Ganja-smoking is prevalent, more or less, in all classes of the people in Bhagalpur as in Lower Bengal. In Bhagalpur, Goalpara, and Cooch Behar I have observed a peculiar similarity in the observance of a ceremony, *viz.*, the uncultivating portion of Goalas, who tend cattle, are the hardest smokers of ganja, and it is essential that ganja should be smoked to a very considerable extent at *Bathan* at the time of Kalipuja, *i.e.*, *Deuli*.

21. Chur is preferred because of its containing less leaflets than in other kinds of ganja. Rolled kind of round ganja is not at all liked in Bhagalpur (*vide* answer to question 2).

22. In Jangipur charas is imported from Mirzapur.

23. I have not seen but heard of bhang-smoking in Jangipur, but in very rare instances, and by men of low classes. Generally speaking, bhang is not used for smoking.

24. Bhang is not confined particularly to any class, except those generally known in Bengal and Behar by the term "Marwaris." It is used by all classes, and more, I believe, by the higher than the lower classes of the people. It is generally drunk. The use is not particularly confined to any locality or district.

In Central Bengal I hear it is customary, even among the higher classes of the people, to drink bhang on the Dasahara day.

26. In respect of ganja I think the proportion would stand thus—

- (a) 30 per cent.
- (b) 60 "
- (c) 8 "
- (d) 2 "

and in respect of bhang thus—

- (a) 50 per cent.
- (b) 20 "
- (c) 25 "
- (d) 5 "

27. (*Vide* my reply to question 24.)

I do not believe that it is any particular habit or circumstances of life that has caused the spread of the use of these two drugs.

28. In the case of bhang—

- (a) about $\frac{1}{2}$ tola, price about $\frac{1}{2}$ pice.
- (b) " 2 " " 2 "

In the case of ganja—

- (a) about $\frac{3}{16}$ of a tola, price about 2 pice.
- (b) " $\frac{3}{16}$ " " 8 "

29. In the case of bhang—

- (a) ordinarily pepper or sugar is mixed.
- (b) exceptionally coriander, cucumber seeds, milk, etc.

In the case of ganja—

- (a) raw tobacco, *i.e.*, tobacco without molasses called *karshan*.
- (b) exceptionally rose-water, white sandal, cardamom, and atar.

I know no instance of admixture of dhatura. The admixture of pepper in bhang increases flavour, and sugar and those under (b) increase intoxicating power. In case of ganja (a) is essential to produce intoxication, and those under (b) give flavour and is resorted to by well-to-do men.

30. In about 75 instances out of 100 I believe ganja is smoked in company and in 25 instances in solitude. But even those companies of smokers are too careful to expose themselves to public view. Bhang is drunk in solitude by habitual consumers and in company by occasional drinkers. There is no shame in drinking bhang before those who do not drink the same, but the contrary is the case in respect of ganja. Both ganja and bhang are mainly confined to the male, but to no particular time of life. It is not usual for children to consume any of the three drugs.

31. I include charas in replying to this.

The habit of consuming ganja is very easily formed, but such is not the case in respect to bhang. It is difficult to give up the habit of

smoking ganja and easy in case of bhang. Generally a moderate smoker of ganja becomes an excessive smoker in no time. Such tendency is strong in the case of ganja, but not so in the case of bhang.

32. The custom of smoking ganja at *Deuli*, as stated under question 20, is both social and semi-religious. There is another religious custom in some Lower Bengal districts called "Tinnath puja," when smoking of ganja is essential. Only one pice worth of ganja is prepared, and low class people of the village congregate and sing in honour of the god called "Tinnath." It is of late growth among low class people, and is performed at night when certain ailment is cured on the belief of that god. It is not unusual that ganja smokers smoke in that assembly ganja other than the pice worth offered at the puja; one pice worth of betel and betel-nut and one pice worth of oil is also offered.

The other ceremony, *Deuli*, is performed in open fields, chars or jungles, where cattle, specially buffalos, of several owners are collected together. The owners of the cattle as well as those that tend the same, assemble and perform certain religious ceremony, wash the cattle, rub oil on their horns, and then sing and smoke ganja to their heart's content. It is done once a year at the time of Kalipuja.

The use of ganja is essential in both the above-mentioned customs. The use of ganja in Tinnath puja is temperate, but in *Deuli* it is excessive. The former tends to initiate young men of low class to the use of ganja, but the latter is confined to confirmed smokers, and hence not much injurious to them.

33. The consumption of ganja and charas is regarded by the society as a vice full of injury to the smokers directly and to his family indirectly. The smokers of these two drugs are certainly looked down upon, and shunned by the good members of the society. The epithet "ganja-khor" is applied in derision to a person of rash temper and prone to violence and indiscreet acts and words. Ganja and charas smoking brings neglect to business and pursuit, unnecessary burden and expenditure to the family, and purging of blood and turning of brain at the end; hence the social public opinion against the use of ganja and charas. The use of bhang is not fraught with so much injuries, and hence not held in so much disrepute.

I am not aware of any religious opinion against ganja, charas, or bhang, or of any custom of worshipping the hemp plant.

34. To forego the consumption of any of the three drugs would be considered as a privation by habitual excessive smokers only, and not by other classes of smokers as classified in question 26. The other classes can forego it with a little effort. An habitual excessive smoker of ganja becomes eager for it when deprived of his daily dose, and seems to be restless till he gets it. But such restlessness is more imaginary than real; for I have heard even the most confirmed ganja smokers (*e. g.*, sanyasis) say that they can live without it for a fortnight or a month without any injury to health. Such religious devotees say that they smoke ganja only for concentrating their mind to one idea to the exclusion of others, and not for any other purposes.

To forego the use of bhang is calculated to produce indigestion in habitual drinkers; but I did not try any particular case to watch the real result.

I have no experience of any charas smoker.

The number of persons feeling the discontinuance of ganja, charas, and bhang as a sort of privation will be very limited.

35. I think it is quite feasible to prohibit the use of ganja, charas, and bhang, except when bhang is required for medicinal purposes for preparation of medicines under the Ayurvedic system by kabirajes. Bhang will to some extent be used illicitly, as it grows wild. Ganja will not be available easily without detection. To detect illicit collection of bhang would lead to petty oppression and unnecessary harassment; but cultivation of ganja is widely known to be prohibitive, and can be severely dealt with. Preparation of charas is not, I believe, known to the people, and hence it will not be heard of after prohibition of importation.

The prohibition can be effected only by legal force and strict supervision by an honest class of officers for at least a period of five years. I would not leave the supervision entirely to the police, but to a class of young, active, educated, and honest officers appointed in the Excise Department constituted as at present.

I do not believe that the prohibition would occasion any serious discontent among the consumers. Certainly it would be absurd to believe that the temporary discontent, if any, among the limited number of smokers that are disliked and looked down upon by the vast numbers of the people who would hail such a prohibition, can ever amount to a political danger. It is an argument that I should call ungenerous to the people at large and far-fetched on the part of those who advance it. The prohibition may create a pleasing grumbling among the smokers, similar to what was observed on the re-introduction of distillery system in the town and enhancement of retail price of liquor both in town and in the interior, which caused many poor drinkers of liquor to be thrown out. The majority and better classes of the people will bless the Government and sympathize with its action. The ordinary habitual and occasional smokers among the ignorant mass will consider, as usual with all Government measures, that the benign Government of the Queen has taken this step for their benefit; and the few murmurers will lament in solitude.

But the public sympathy will be lost; nay, the public will certainly advocate the use of the drugs, if prohibition of ganja and charas be followed by a cess or tax on the innocent.

The prohibition may be followed by having recourse to alcoholic stimulants to some extent and not to other drugs. In my opinion bhang should be left unprohibited and taxed higher than at present, so that on the prohibition of ganja, hard habitual consumers of the same may fall upon bhang if they like.

36. I have seen no instance of foregoing ganja, charas, or bhang for the adoption of liquor, and have no reason to believe that such a tendency of substitution of liquor for drug exists. I am aware of instances, though rare, of the same person taking liquor, bhang, and opium.

37. The effect of charas is produced slowly and by degrees; but that of ganja is quick and very sudden. Charas is said to be milder than ganja.

38. No, except that the "rolled round" (*vide* (b) in answer to question (2) is said, in Bhagalpur, to turn the head and make one feel giddy.

39. *Nil.*

40. Bhang is prescribed by kabirajes and quacks for its medicinal qualities. It forms one of the ingredients in many kinds of medicines prepared on Ayurvedic system. No mention is made, I hear, of ganja in that ancient work, "Ayurved"; the drug mentioned is siddhi. Probably siddhi was not then developed into ganja by cultivation.

Bhang is used in the treatment of cattle diseases.

41. I am not aware of any instance in which charas or ganja is ever used—

- (a) as a food accessory or digestive ;
- (b) to give staying-power under severe exertion or exposure, or to alleviate fatigue ;
- (c) as a febrifuge or preventive of disease in malarious or unhealthy tracts ; or
- (d) in any other way.

But bhang is said to be used for digestive purposes; and in villages where medical aid is not easily available or ready at hand, it is administered in cases of cholera after the first or second loose motion. I speak of moderate habitual use of bhang as digestive.

42. To my knowledge and in my experience, the use of these three drugs is neither beneficial nor harmless.

43. Yes, except so far as the smokers of ganja are apt to be irritated, when the neighbours take good care not to come in contact with them.

44. In the case of bhang, as soon as it is drunk it produces a cooling sensation in the stomach. The drinker would feel inclined to smoke tobacco if he is accustomed to it, and as he smokes on the intoxication would increase. It is refreshing, produces intoxication, increases hunger and creates appetite. Its effect lasts about six hours, and produces dullness and lethargy as after-effect, but no longing for it.

In the case of ganja, as soon as it is smoked the whole frame becomes warm and a shock is felt on the brain; it is all sudden and quick. It is refreshing, produces intoxication, and increases hunger to some extent, creates appetite, lasts about two hours, produces no dullness or lethargy, but produces longing for it.

45. In answering this I confine myself to ganja alone.

I believe that even the habitual moderate use of ganja produces noxious effects, physical, mental, and moral. It makes a man look emaciated, causes periodical purging of blood, which may or may not be dysentery, and produces symptoms of chronic bronchitis. It produces indifference. Habits of immorality and debauchery are often seen associated with ganja-smoking; but I am not sure whether such habits are the cause or effect of ganja-smoking.

It is seen in most cases to deaden the intellect, and in some to produce insanity.

The four instances I know of insanity produced by ganja-smoking were of a permanent nature. The insanes would talk to themselves in incoherent questions and replies, and laugh, while thus talking, regardless of what others speak or think of them. They used no violence to others if left undisturbed.

In three instances in which I had the opportunity of being personally acquainted with such insanes while sane, there was no known mental anxiety or brain symptom that can be supposed to have produced or accelerated the insanity. The

persons belonged to higher classes of society, in two cases living in affluence, and in the third with limited means. Apparently they were not of weak intellect, and their parents and brothers did not prove to be of weak intellect.

In the fourth instance I met a lunatic of higher class in the Dacca Lunatic Asylum, who talked of the loss of his property alone to himself. One of his neighbours with me told me that ganja made him so.

In these cases I am not sure whether it was the habitual moderate or habitual excessive use of ganja; but in the first three cases I am certain that the use was habitual.

46. *Vide* latter part of 45.

47. I do not think that the use of any of these three drugs, either moderate or excessive, can have any hereditary effect or that the habit can be acquired by the natural law of inheritance.

48. *Vide* No. 47.

51. Bad characters, such as habitual thieves, robbers, and dacoits, are not necessarily habitual smokers of any of these drugs. But I have heard from bad characters themselves, *e.g.*, confirmed thieves of small local gang, dacoits and way-layers that it is customary for them either to drink liquor, or to smoke ganja in one pipe, irrespective of class and creed, before going out on excursion, and that it facilitates the perpetration of the crime that need be perpetrated by desperate characters. Such occasional use is never excessive.

52. *Vide* above.

53. *Nil.*

54. *Vide* No. 51.

55. I have not heard of any such instance. Ganja alone, and neither bhang nor charas can produce complete stupefaction without admixture.

62. It is impracticable to exercise any control effectually in respect of the production of bhang, as the plants cannot be eradicated. Any pressure brought to bear on the possessor of the soil spontaneously growing bhang plants would prove to be an oppression and harassment.

63. It would be well if the three classes of ganja could be reduced to one while in course of preparation in Naogaon.

My reasons for this are as follows :—

- (a) Since 1885 I believe there have been too many fluctuations in the rate of duty on each class of ganja with a view to adjusting the real actual smokeable quantity of the drug in a seer of each of the three kinds. But I believe the proportion is still defective, and it will ever remain so, because some of the wholesale dealers or brokers purchase the standing crop, and cause a preparation of the kind more or less just as the rate of duty would suggest to be lucrative. Hence we find that in some year one kind of ganja is more imported than the other, and next year contrary is the case.
- (b) This change in duty (always towards enhancement) has been introduced in the middle of the year, which serve to disturb the men in the trade who were thus forced to grapple with a difficulty of which they had no notice when taking the license.

- (c) Malpractices can often be resorted to by the wholesale dealers by converting flat into chur and utilizing the same to make up the deficiencies in chur at the close of the year and showing deficiency only in flat and thus paying less duty.
- (d) For the purposes of comparing consumption in consecutive years, the comparison would be fairer than as shown at present if there be only one kind of ganja. For in a maund of flat the actual quantity smoked is much less than in a maund of chur, and it is misleading to compare one maund flat with one maund chur.
- (e) For the above reason the consumption in retail shops too cannot be accurately ascertained without an intricate way of calculation for fixing the upset price of shops and selling the licenses thereof.

For the above reasons I would suggest the unification of the three kinds and fixing of one duty if it be feasible to effect this unification in the producing subdivision, Naogaon.

64. It seems to be unfair to charge for wastage under the existing rules when such wastage is more nominal than real,—i.e., produced by the effect of climate. Ganja weighed one maund at Naogaon in damp weather is sure to be found less in weighment made in Behar when the wind blows from the west and not from the east. The wastage should be charged in cases of abstraction or sale or theft on transit, and not in cases beyond human control.

In not a few instances ganja is abstracted from bags on transit by rail. The quality of the bags and the mode of packing should be improved.

I would suggest the discontinuance of the loafers known as wholesale dealers in ganja. Railway communication has removed all difficulties in transport, and ganja can be indented by the Collectors of districts upon Naogaon authorities or wherever the Government principal store-house may be. There should be a head office at Naogaon with a responsible officer, and each district will account with that head office as to quantity of the drug only, duty being realized, as at present, in the selling districts. Under such arrangement Government can introduce special uniform bags and adopt the system of packing now in use for packing the postal mail bags.

Abolition of wholesale dealers will give certain relief to the retail vendors, and Government can then enhance the duty to the extent of that relief, which will be much more than the cost of transit to be incurred by Government, and the interest of the capital to be advanced for the purchase of the crop from the cultivators.

This change will simplify accounts and give relief to the clerks.

It will set the retail vendors at liberty to bid freely at auctions. At present a vendor in arrear to a goladar cannot bid against the wishes of such goladars. Practically I have seen that goladars are one of the factors at the annual auction in more than one way.

65. I think the present rate is reasonable and sufficient and see no necessity for any change.

66. *Vide* No. 63. I am in favour of unification.

67. No. It is sufficient for the purpose.

68. There is no prohibition to smoke on premises of shops. Bhang is never consumed on the premises of retail shops: ganja is seldom consumed in vend shops. I have no objection to such shops and houses as they are at present,—i.e., like the shops for the vend of any necessary articles.

69. No. Such shops are not considered as a nuisance like liquor shops. There is no harm in consulting the local public opinion in this respect.

70. Nepal grows wild ganja. Its flavour is not much relished by our people. The Nepalese too prefer our ganja. But those of our people who live along the northern frontier of Bhagalpur and who wish to have cheap intoxicant smuggle in Nepal ganja. The smuggling is not carried on to any appreciable extent.

Oral evidence.

Question 1.—I have been in the Executive Service since 1885. Previously I was in the Education Department.

Question 45.—I only know these four cases of insanity attributed to ganja; with three I was personally acquainted. None of them was in any asylum. They were all three in my village. It was Rajnagar in District Faridpur (formerly Dacca). It has been washed away by the River Padma. It was a very large village. Out of it twenty-five villages have been formed. I first knew of these three cases when I was about twenty-one or twenty-two years of age. I am now thirty-nine years old. It was eighteen years ago that I first knew them. I used to know the men when I went home on vacation. Two of them were mad eighteen years ago. The third turned mad three or four years later. I have never lived in the village for more than a month and a half at a time since then. People used to say at the time that these people had gone mad from ganja. Of course, as school-boys, we just believed what we heard and observed only a fact of insanity and nothing more. Later on, we began to think more of cause. Then I was unable to find any other cause. Thus my priest, who is one of the cases, has a most intelligent brother. His father is a pundit. Of course, if there is any disease in him unknown to us, it may be the cause. We cannot tell these medical questions. I have had no medical training. Two of the men are dead; and one I saw alive about three years ago. The other two died some six or seven years ago. I am not sure. I cannot say when they died. One died after fifty years of age, of purging of blood. I heard this later on from some of his family members. Of course, it is very difficult to judge of cause or effect. The other man who died, died about thirty-eight years old. I do not know what he died of. The third man, who is still alive, is thirty or thirty-one years old, or at all events below thirty-five years. I know of no case later than these.

My home was thrice swept away. We began to move back our house in 1872. We removed from the village entirely about ten or eleven years ago. I cannot accurately remember. Only one of the above men—viz., my priest—went to our new village.

54. *Evidence of BABU HIRA LALL BANERJEE, Brahmin, Deputy Magistrate and Deputy Collector, Monghyr.*

1. Experience gained during the course of my official career, and personal experience.

3. Bhang or siddhi grows spontaneously in the district of Monghyr.

5. I have seen bhang grow wild in the South Gangetic tract, north of the hilly range in low fallow soil.

6. Ordinarily scattered.

15. Bhang procurable in the bazaar is cleansed of dust and the seeds separated. The dry leaves are soaked in hot water for about an hour or so, and then dried in the sun. A quantity of this is then pounded in a stone jar with the following ingredients by means of a rod of *neem* or lemon-wood into a clay-like consistency, and eaten either in pills, or after being mixed with water or milk with name of "Bom Mahadeo." The ingredients are one or more of the following according to the means and taste of the person who drinks:—

(1) Gol mirich (pepper); (2) sarip (seeds of cucumber); (3) spices (ilachi); (4) sugar.

32. Bhang is consumed by the Hindu people of Lower Bengal (Bengalis) on the last day of the Durga puja to exhilarate the spirits, and to act as a check against ennui. So far as I am aware, the practice is not enjoined by the Hindu religion; but it seems to have got the sanction of social custom. At shrines of Siva, bhang pounded into clay and mixed with milk and water is poured over the lingam.

33. Upper and middle classes of the people smoking ganja are held in disrepute by their equals. Amongst the labouring classes of the population the practice is not held in disrepute, although their superiors in caste or rank generally would prefer one who does not smoke ganja as a personal or household servant. Bhang is rarely drunk to excess, and, when so, it is not held in disrepute by any class. Charas is held in disfavour by all classes of society. Religious mendicants of the Sivite class freely smoke ganja, and the practice is not held in disrepute amongst them.

The reasons probably are that the labouring classes find ganja to be a stimulant, which enables them to engage in severe manual labour without feeling fatigue, and to act as a protection against damp and chill to which at times they are exposed owing to insufficiency of clothing. Amongst the upper and middle classes of people, who are generally of more sedentary habits, ganja has an injurious effect. The prevalence of the custom of ganja smoking amongst these two classes is very rare. Sanyasis or religious mendicants of the class described above affect to consider ganja as producing a concentration of mental energies for purposes of religious meditation; but I think the almost universal prevalence of the custom amongst this class is due to the fact that it acts as a protection against cold and damp, and softens the rigours of hunger to which they are habitually exposed.

Bhang, when moderately drunk, is considered to aid the digestion.

Charas is looked upon with disfavour more from a religious point of view, as it is believed that it is collected on the skin of animals.

35. The labouring classes and religious mendicants would consider it a serious privation to forego the consumption of ganja. The prohibition of the use of ganja would give rise to considerable discontent; but I do not think it would give rise to any political danger. The prohibition of ganja smoking would certainly be followed amongst the labouring classes by greater recourse to alcoholic stimulants, tari or other intoxicating drugs, *e.g.*, opium. Siddhi is looked upon as a sedative and a cooling beverage, and people would be generally sorry to lose it. The use of charas might be restricted without evoking any such feeling.

36. Alcohol finds greater favour with the well-to-do classes of artisans and labourers. Even amongst some of the more advanced of the middle classes of Lower Bengal, whose forefathers were content with a chillum of ganja or a dose of opium, there are many who, if they can afford the expense, would take liquor, and imported liquor in special, as more heroic.

37. Charas is more mild. This and ganja raise up the energies, and expand the physical faculties.

40. Bhang is prescribed in cases of (1) diarrhoea, (2) piles, (3) cattle-disease. After a day's hard work given to a horse, it is not unusual to give it some siddhi and molasses mixed up together as a sedative.

42. Moderate use of ganja amongst the cultivating and labouring classes and mendicants is harmless if sufficient food is available. Bhang in moderate quantities is supposed to be beneficial.

43. Not offensive.

46. Habitual excessive use of ganja is believed to produce insanity, especially amongst the sedentary classes of people. Amongst the working classes it is believed not to produce much evil effect. But even in cases of excessive use of ganja amongst the sedentary and upper classes, it is difficult to say how much the insanity is not due to other causes, *e.g.*, mental anxiety, brain disease, etc., superadded to it.

47. Possibly not.

49. The use of these drugs is sometimes resorted to as an aphrodisiac, but, when so used, it is generally believed to bring on impotence.

51. Generally rioters and bad characters are supposed to be ganja smokers. From the facts recorded on the subject, it will appear that dacoits generally smoke ganja before the commission of the crime, in order to fortify themselves for the act. Most probably such people were not excessive consumers, as they had to act with considerable deliberation and skill.

53. It is very difficult to connect the premeditation of the crime and the consumption of ganja as cause and effect. I think the premeditation is made without it, and the drug is subsequently resorted to in order to fortify the mind and body.

54. *Vide* answer to question 51 above.

55. *Evidence of MAULAVI ABDUS SAMAD, Deputy Magistrate and Deputy Collector, Purulia, Manbhum.*

1. I have been connected with excise administration since 1887 in my official capacity as Deputy Collector in the district of Murshidabad, Arraria subdivision of Purnea district, Satkhira subdivision of Khulna district, and Khulna district head-quarters and Manbhum district. In the district of Khulna I was Excise Deputy Collector and hold the same office in Manbhum. In the Murshidabad district I used to remain in charge of the district excise office during the special Excise Deputy Collector's absence on tours. In the subdivisions excise was one of the various departments falling within the ordinary jurisdiction of the subdivisional officer.

2. Charas.—The resin which exudes from the flower and leaves of the hemp plant is charas. Ganja consists of the dried flowers of the female hemp plant. There are three recognised sorts of ganja—flat, round and chur. Flat and round ganja are each manufactured by distinct and special process, in order to get rid of the leaves and as much of the stick or twig on which the flower grows as it may be practicable to dispense with. The chief difference between flat and round ganja is that the former contains much more useless wood and twig than the latter. In flat ganja, the twigs are almost as large as branches, while in round they are cut as short as possible. In the preparation of the round ganja greater manipulation is used to get rid of the leaf. Round ganja also has entirely different appearance from that of flat ganja, owing to the rolling of each branch in the drying process, giving the flowers a rounded form. Chur ganja consists of the broken bits of the flowers which drop off in making flat and round ganja.

In the Lower Provinces these definitions apply. No special names for any locality.

3. Bhang plant grows spontaneously in Rajshahi and Murshidabad, in which districts it is abundant. Ganja plant is spontaneous in Murshidabad, though not abundant.

4. Generally called siddhi plant.

5. Wild hemp grows most in alluvial lands saturated with moisture.

6. Ordinarily dense in a small patch of land about homesteads.

7. (a) Yes, in Rajshahi.

(c) Yes, in Rajshahi, I am told.

(d) Yes.

8. Not known.

9. None that I have personal knowledge of.

10. Not a special class, but agricultural cultivators.

11 and 12. Not known.

13. (a) Yes, only Rajshahi. (b) Alluvial tracts with a certain extent of moisture would favour the growth of hemp plant. (c) Impossible in high hilly parts of the country.

14. (a), (b) and (c) Yes.

Ganja and bhang in Rajshahi.

15. Have no personal knowledge.

16. (a) No.

(b) Yes.

(c) No.

17. Not known.

18. These drugs deteriorate by keeping, and quite lose their effect in time. They keep good about two years. Damp and exposure are the causes of deterioration. Dry air and heat can prevent deterioration.

19. Ganja is used also for eating, but very rarely. Not so charas, which is never eaten. Ganja with mustard oil is used as medicine for infants affected with cold and swelling of the glands, also as a medicine for itches and other skin diseases.

20. Ganja is smoked generally by the day-labourers, cartmen, porters, masons, palki-bearers, sanyasis and jogis, fakirs, up-country darwans or porters, Rajputs acting as athletes, and Brahmins who worship Kali. Bhang is taken by up-country men living in this country generally during the months of March, April, May and June in the evening in the form of sherbet. Also by others having bowel complaints, looseness, etc., etc. Charas is smoked generally by well-to-do people among Muhammadans and Hindus (rarely the latter class) in the district of Murshidabad. I have known numerous Shiahs of the Nizam family and their akrobas given to charas smoking. In this district members of certain Raj families are known to be charas smokers.

21. Round ganja is generally preferred for smoking.

22. In Murshidabad native charas; also Nepal charas is suspected to be in the use of some members of certain Raj families.

23. Yes; occasionally by people who wish to induce the habit of ganja smoking in future.

24. Bhang is drunk ordinarily, also eaten with pan leaves.

25. Use of ganja, as also bhang, is on the increase. The necessary figures showing consumption of these two articles in this district during the last three years are given:—

	Ganja.			Siddhi.		
	Mds.	S.	Ch.	Mds.	S.	Ch.
1890-91 . . .	38	14	6	0	38	12
1891-92 . . .	43	19	9	1	23	10
1892-93 . . .	43	18	6	1	35	8

There is no licensed shop for sale of charas in this district, and the consumption of this article cannot be ascertained. Reasons of increase in the consumption of ganja seem to be the increase in the number of the classes of the people who are ordinarily required by the nature of their occupation to use ganja. The names of such classes have been mentioned above. Also a few given to liquor-drinking have taken to ganja owing to its cheapness.

26. As far as this district is concerned, only very approximate figures can be given as below:—

	Ganja.	Bhang.
(a) 60 per cent. . .	.	90 per cent.
(b) 20 „ . . .	2	„
(c) 15 „ . . .	6	„
(d) 5 „ . . .	2	„

27. Ganja and bhang—

- (a) Fakirs, sanyasis, up-country men, darwans.
- (b) Brahmins who worship Kali, palki-bearers, porters, labourers, etc., etc.
- (c) Young people prone to gaiety.
- (d) Those among the latter class who have no control over themselves.

I have learnt by enquiry from numerous consumers of ganja that they contracted the habit by keeping company with people given to ganja smoking; such people might be members of their family either a grandfather, a maternal uncle and sometimes an elder brother, who would probably ask the novice to prepare the chillum or put the chillum in its place after ganja has been smoked, and on the latter opportunity the man in charge of the chillum would take a pull.

Ganja.	Bhang.
28. (a) 3 to 7 pice	1 pice.
(b) 8 to 10 pice	3 pice.

29. (a) For ganja—ordinarily tobacco leaves, as also prepared tobacco. For bhang—golmirich (black pepper), sugar and mowri.

(b) Exceptionally for ganja, dhatura; for siddhi, rotten knots of babui thread in old thatches and sugar and dhatura and powdered seeds of cucumber. Bhang massala is not heard of here.

30. Ganja is ordinarily smoked in company and seldom (when no company is available) in solitude. Bhang when taken for purposes of amusement is drunk in company, otherwise in solitude. Females have been known to consume ganja, especially Bowri women and female companions of Baisnab mendicants who assume Bhek. Bhang is also taken by female Baisnabs and women of light reputation generally. Ganja is ordinarily consumed by people above thirty years of age. Bhang is begun earlier in life. Ganja is consumed by children, especially those that attend upon mahantas and jogis as intending disciples.

31. In the case of ganja and bhang the habit is easily formed. Ganja is difficult to give up. The tendency referred to exists.

32. It is customary with the Hindus of Lower Bengal to consume bhang on the Bijaya Dasami day of the Durga Puja festival. The offering of a little quantity of bhang to the goddess Durga seems to have been prescribed as an essential element of the day's worship as in Raghunandan's Smriti Tatwa. There does not appear to be any Pauranic sanction for this kind of worship. Many Hindus believe that the hilarity to be caused by the consumption of bhang on the Bijaya Dasami day is to commemorate Rama's victory over Ravana, won after the assurance of goddess Durga who was propitiated by the offering of 108 lotus flowers. Ravana is said to have been vanquished and killed on the Bijaya Dasami day. The use of the drug (bhanga) on such occasions is generally moderate except with the few. It is not likely to lead to the formation of the habit, but is highly injurious as judged from after-effects on the day following Bijaya.

33. Consumption of ganja is regarded as leading to habits of laziness, inactivity, and persons who are given to the practice are looked upon with great distrust. There is a strong social public opinion against those who consume the drug, such people being regarded as unworthy of confidence. A *ganjari* is a nickname for

people who generally bear this character. This sentiment is to be attributed to the effects which ganja consumption brings on its victim. The consumer of bhang is generally credited with uprightness, courage and physical strength. Such people, however, are generally rash.

No; I am aware of no such custom of worshipping the plant.

34. Ganja.—Foregoing consumption of ganja is likely to be serious privation to habitual moderate and excessive consumers. Many are such, the nature of whose occupation and daily work demands the use of the drug which alleviates pain and supports the frame under severe exertion or exposure. For probable numbers, *vide ante* (answer 26).

Bhang.—Foregoing consumption of bhang is likely to be serious privation to no class of consumers.

35. Bhang, feasible. Ganja, not quite so. Ganja would be consumed illicitly when procurable. It is not easy to suggest means of prohibition. Serious discontent among consumers of ganja would ensue. It will not amount to a political danger. (a) Yes; to some extent. (b) Yes; such as opium.

36. Rather the reverse is the case for ganja; the reason is the comparatively smaller cost at which a ganja smoker can get himself intoxicated. One pice worth of ganja is supposed to give greater intoxication than four pice worth of outstill liquor. Many have given up liquor and taken to ganja.

37. Not known to me.

38. Yes; in degree, in intensity of intoxication. Round ganja is supposed to be most effective in this regard, chur less, and flat least.

39. No; except in cases in which ganja or bhang is used with dhatura.

40. (a) Bhang is used by native doctors in the preparation of medicines for dysentery, leprosy and other diseases.

(b) Not known.

41. Moderate use of bhang, but none other may be beneficial in its effects.

(a) As a food accessory or digestive. Charas may, and ganja does prove beneficial in its effects.

(b) To give staying-power under severe exertion or exposure, or to alleviate fatigue.

(c) Charas and ganja in moderation may serve as febrifuge or preventive of disease in malarious and unhealthy tracts.

For purposes mentioned in (a), people generally having bowel complaints occasionally use bhang. For purposes mentioned in (b) and (c), people of the labouring class use ganja habitually in moderate quantities.

42. Beneficial as stated above.

43. Yes.

44. Refreshing to a certain extent; intoxication in a small degree; allays hunger for a little while; creates appetite; effect lasts about two hours; after-effects: general weakness of the system, dulness, a headache lasting for a short while. Yes. The want of subsequent gratification produces longing or uneasiness.

These refer to ganja and bhang.

45. Ganja.—Habitual moderate use of ganja produces physical debility, mental disorder, and leads to debauchery in the earlier stages of the habit.

Not so bhang. Use of ganja, as above, makes the eyes sunken, the temples depressed, the cheeks thin, the neck slender, and altogether the whole system weak and powerless. Bhang not so. Ganja injures digestion and causes loss of appetite in the long run. Not so bhang. Ganja causes dysentery, bronchitis or asthma in the long run. It is said that ganja smokers generally die of dysentery. It does impair the moral sense, does induce laziness and habits of debauchery and immorality. Immoderate use of ganja certainly deadens the intellect and is believed to produce insanity—in some cases temporary and in others permanent according to the nature of the consumer's constitution.

Cannot say from experience regarding cases with which I am acquainted.

46. Needs no reply (see above).

47. Not exactly hereditary.

48. But has been known to affect persons of the same family.

49. Ganja and especially bhang are.

50. Consumed in the first instance as aphrodisiac. Most young men fall into the habit under that notion. Prostitutes use bhang with the same object. The use for this purpose is more injurious than its use as an ordinary narcotic, as the after-effects of exhaustion, etc., etc., are great. Habitual use of ganja in excess produces impotence too early.

51 and 52. Nearly all clubmen, rioters, house-breakers, thieves, and dacoits especially in Lower Bengal, are consumers of ganja in moderation or excess. They generally have a smoke of ganja before sallying forth on an expedition. Petty thefts are often committed by people given to ganja smoking but having no means of satisfying the craving.

53. Excessive indulgence in ganja is believed to incite to unpremeditated crime. I know of no case in which it has led to temporary homicidal frenzy.

54. Ganja, and occasionally bhang in excess.

55. Sometimes criminals have been known to stupefy travellers on the way by inducing them to smoke ganja falsely representing it as tobacco, and then robbing their victim. Without admixture complete stupefaction cannot be induced.

56. Ganja smoked without tobacco leaves is oppressive on the throat, producing violent coughing. Bhang used with golmirich has a cooling effect.

Nothing special to note.

57. Cannot give any. I am told that ganja, when eaten, does not give intoxication so immediately as when smoked.

58 and 59. The system under which ganja and bhang are supplied to the consumers has been known to cause no inconvenience to the public, and is believed to be working well. In view, however, of the increasing consumption of ganja there ought to be further check in the shape of enhanced duty.

60 and 61. Cannot say.

62. Cannot indicate any.

63. There appear to be none.

64. None that have been advanced by the parties concerned.

65. There is no great disparity in the rates of taxation upon ganja and bhang. But supposing that one pice worth of ganja gives as much intoxication as four pice worth of country liquor and two pice worth of opium, I should say that there is ample room for improvement in the taxation of ganja.

66. There should be different rates of taxation for different kinds of ganja, according to the amount of intoxication that a particular kind of ganja is supposed to give.

67. None: only this, that with a view to check further increase of ganja consumption rates of duty should be further enhanced.

68. None in this district.

69. Yes. In Municipalities opinion of Municipal Commissioners is taken; in the mufassal, of chief village men. Local public opinion ought to be considered.

70. None known to me.

Oral evidence.

Question 1.—I entered the Government service in January 1887 as Deputy Magistrate.

Question 3.—The bhang plant and the ganja plant are not the same. I am not very sure of this. As I am now informed that the plants are the same, I am probably wrong.

Question 30.—I have seen boys as young as eight years old taking ganja. I can remember one in the Manbhum district, who was nine years of age. No others.

Question 35.—In saying that it is possible to prohibit bhang, I mean that if it were prohibited people would not care to take it, whereas if ganja were prohibited, the people would continue to procure it some way or other. The ganja smokers are more addicted to their habit than the bhang drinkers are to theirs. The bhang plant would of course require to be exterminated. The extirpation of bhang in the Murshidabad district would not give rise to serious discontent. I cannot answer for any other district.

Question 36.—In this answer I am speaking of the Manbhum district only in reference to the substitution of ganja for alcohol.

Question 51.—In this answer I am speaking of the Khulna district, and my statement is based on my magisterial experience. It sometimes comes out in evidence that such people were in a state of intoxication from ganja. My impression is general and not derived from special enquiry into the subject. By intoxication it is meant that the men had taken enough to make them harder, not to render them insensible. The word "nasha" might express this, it does not necessarily imply insensibility.

56. Evidence of BABU KHIROD CHUNDRA SEN, Deputy Magistrate and Deputy Collector, Singhbhum.

58. My answers relate to ganja only.

I am acquainted with the present system of excise administration in Bengal, having been con-

nected with it as Excise Deputy Collector of two districts, viz., Dinajpur in Northern Bengal and Singhbhum in the south-west of the province.

I consider the system is capable of improvement. My opinions relate to ganja only. I am not much acquainted with charas and bhang.

59. The system is capable of improvement in the direction of bringing it more thoroughly under the control of Government. As at present worked, the system is controlled by Government on the one hand and by the three outside factors on the other: *viz.*, (1) the cultivator, (2) the wholesale vendor, and (3) the retail vendor. These three factors are more or less independent of Government control. They can each in his own sphere influence the final cost to consumers. The truth of the following proposition seems undisputed:—

“Fluctuations in the cost (for a given quantity) to consumers has a tendency to increase consumption.” This proposition is based upon the following theory which embodies the result of long experience.

The ratio in which a man's desire to indulge in an intoxicant increases with a given ratio of increase in the facility of gratifying it, is greater than the ratio in which his desire will decrease with an equal ratio of decrease in the facility. Thus if a man's consumption of ganja increases in the ratio of 8 to 10, while the cost decreases from 12 to 8, his consumption will only decrease from 10 to 9 when the cost increases from 8 to 12. The net effect of the double fluctuation would be an increase of consumption from 8 to 9, while everything else outside of him has come to its old position. The avowed object of the present system of Excise Administration being to reduce consumption and thereby to improve public morality, its duty is to prevent as far as possible any fluctuation of the kind referred to above. The cost to consumers should be slowly, but steadily, increased, so as to effect a corresponding slow but steady decrease of consumption. Increase one year and decrease in the next is most harmful to the consumers. A year of cheap ganja will have the effect of increasing the desire for gratification, and a year of dearness will accustom the consumer to increased cost of gratification. It is possible therefore by a clever alteration of cheapness and dearness in successive years to enormously increase consumption and effect the ruin of the people. It is impossible to regulate consumption if all the factors that influence it are not brought under the complete control of Government. The cost to consumers must be steadily increased and consumption steadily decreased. Two points require notice in this connection.

(1) It is not enough to say at the end of a number of years that the consumption is less at the end than it was at the beginning of the period. But it must be shown satisfactorily that during the period the consumption has never increased even by the smallest quantity at any point of time. Each succeeding year, month and, if possible, day should show a decrease of consumption, however small, but *always* decrease and *never* increase. This decrease should be participated in by all the divisions, and if possible by all the districts; what ordinarily takes place is increase in some divisions and decrease in others one year, and decrease in the first mentioned and increase in the last mentioned divisions in the next, or something of the kind. This shows that the fluctuations in each locality are great, which in its turn proves fluctuations of a serious kind in the cost to consumers, and the entire absence of Government control. Government is in fact at the mercy of the cultivator, the wholesale vendor

and the retail vendor on the one hand, and to local agricultural prosperity or otherwise on the other. Its own control is virtually *nil*.

(2) The increase of cost should not merely be in the absolute amount as measured by the currency of the Empire, but it should be a real increase, offering a real check to consumption. Thus, if the cost was Rs. 20 in 1875 and it is Rs. 40 now to an individual, there has been no real increase if the man's income has doubled in the meanwhile; and if he is an agriculturist, surely his income has nearly doubled during this period by the mere operation of the currency changes over the world as between gold and silver. General progress of wealth has also perhaps increased his ability to spend more money on luxuries. To determine what would constitute an actual increase in the cost to consumers in any province would be a most complex problem involving many considerations. Government having the entire control of the administration (of excise) would hardly be able to discharge its responsibility satisfactorily. How much less should it be able to discharge it when half the control is not in its hands at all?

For the improvements I propose see answers to questions 60, 63 and 64.

60. Ganja is produced in my province. A tract of country including parts of the Rajshahi, Bogra and Dinajpur districts is selected for the cultivation of ganja for the supply of the whole province. I was in charge of one of these districts, and am of opinion that the cultivation is not adequately controlled. The staff employed for supervision does not appear to be sufficiently strong and well-paid, and the system itself seems faulty. I believe about 10 per cent. of the actual outturn goes into consumption direct from the cultivator's hand without paying duty. A portion is probably also stolen from the fields, to the loss alike of the cultivator and Government. It is noteworthy that in a very large area round the ganja tract there is no ganja shop and none can be opened. The reason can only be that the people smuggle and steal, having facility to do so. In fact, they have only to go and ask the cultivators, in order to have an adequate quantity for the year's consumption. If the cultivators can pass out ganja to their relatives and neighbours, why should they not be able to pass it out to licensed exporters without the Subdivisional Officer of Naogaon ever knowing of it? Indeed the exporters are more dangerous than the thieves.

The cultivator influences the cost to consumers to a considerable extent. The wholesale price which he charges varies from Rs. 10 to 100. This is a large variation and cannot but influence the cost to consumers.

The system on which ganja is grown and manufactured and stored might be modified on the following lines:—

(1) Experiments should be made in an honest spirit to ascertain if ganja can be grown on hill-sides on the system on which tea is grown. If this succeeds, the present system should be abandoned and the tea system introduced. If the experiment does not succeed, the present system should be continued with the following improvement:—

1. The area for which licenses to cultivators are given should be measured, mapped and recorded.
2. The supervision over the fields should be increased.

3. The entire crop should be purchased by Government and then manufactured by its own paid servants.
4. The ganja when manufactured should be preserved in air-tight tin vessels like tea, say each to contain one, two, or more pounds. There should be only one kind of ganja manufactured, namely, chur ganja, from which all extraneous matter has been eschewed. To have three different kinds of ganja looks like having two holes in the door for a pair of kittens.
5. The ganja should be manufactured at Naogaon and at once despatched to convenient divisional centres for distribution to the districts.
6. At least two years' consumption should always be in stock.

63. I have very serious objection to the present system of wholesale vend of ganja. The wholesale vendor exercises a great influence in the revenue of Government on the one hand and the cost to consumers on the other.

- (1) The wholesale vendor should be abolished.
- (2) The ganja should be issued by the treasury officer like opium to retail vendors. There will be no weighing. The tins will be simply handed over.

As regards the retail vend of ganja, I would introduce the following system tentatively:—

- (1) The retail price of ganja will be fixed by Government.
- (2) The number of licenses and the localities will be the same and restricted in the same way as in the present system.
- (3) The vendors would get a commission on the quantity sold.
- (4) The licenses will be sold by auction, preference being given to those who agree to work for the minimum commission.

The present system is a sort of gambling. The elements of uncertainty are considerable.

The final cost to consumers is too much at the mercy of the vendors in the present system.

64. I have objection to the present system of transport. If the wholesale vendor is abolished, the present system of transport will die with him.

65. I do not believe there is any relation between the intoxication produced by ganja and that caused by alcohol. No man discusses within himself—"Now, if I take to ganja I have to pay so much for so many hours' inebriation, and if I take to alcohol I shall have to spend so much for so many hours' enjoyment." Whether a man will drink or smoke depends entirely on taste and circumstances unconnected with cost. The question of cost may influence those who are addicted to both kinds of intoxications. But I believe such men are rare. The theory of interchangeableness of ganja and alcohol is convenient to Collectors who have sometimes to account to superior authority for variations in the two kinds of revenue.

66. I would have only one kind of ganja, namely chur; flat ganja could never be put in tins. The Commissioner says in his last report that consumers prefer flat ganja to chur. He evidently means retail vendors prefer flat ganja to chur. They prefer it because there is an element of uncertainty in flat ganja (in the ratio of the twigs to the actual ganja). The vendor considers this a subject for gambling. He wants and expects each time to get more ganja than twigs. Flat ganja also perhaps pays less duty in proportion to chur ganja. I cannot conceive that there is any difference of quality between flat and chur or even round. The very fact that flat ganja is cheaper (seer for seer) induces vendors to prefer it.

67. My objection to the present method of taxing ganja is shown in answer to question 63.

70. There is no general use of untaxed ganja, but ganja is smuggled from Rajshahi and Native States to a more or less extent.

Conclusion.—Mine is a consistent theory of administration. The final cost to consumers should be independent of all outside consideration. It should be entirely under the regulating power of Government. It should be gradually but steadily increased. No sudden increase will do any good, for that may lead to smuggling or privation keenly felt, which last is only next door to entire prohibition in its results. Fluctuation in the cost is most harmful, resulting in increased cost to consumers without any corresponding gain in social morality. Increase of cost to consumers and decrease of consumption slowly and steadily is my motto. Whatever system helps this is good, and whatever flaw in the administration leads to disturb this is objectionable.

57. Evidence of BABU GUNGADHAR GHOSE, Excise Deputy Collector, 24-Parganas.

1. As Deputy Collector of several districts, I have had opportunities of obtaining information regarding the matters connected with hemp drugs.

2. Yes. The drugs are known as siddhi or bhang, charas, and ganja in this district.

3. Murshidabad, Jessore, 24-Parganas. It is abundant in Jessore.

4. Bhang or siddhi, which refer to exactly the same plant.

5. I am unable to answer thy question fully, but it appears to flourish in the alluvial tracts of Lower Bengal.

6. Ordinarily dense.

7. Yes; but not in this district.

8. I am not aware of any such increase.

9. I am not acquainted with the methods of cultivation.

10. No, the ganja cultivators are of the same class as other agricultural cultivators.

11 and 12. Not so far as I am aware.

13. The cultivation is restricted to the districts of Rajshahi, Pogra, and Dinajpur, known as "Naogaon Ganja Mahal." The districts were selected, I think, for their peculiar soil. I think a soft loamy soil with adaptability for irrigation is necessary for the cultivation of hemp for producing ganja. Its cultivation would be impossible I think in marshy land.

14. (a) In the Rajshahi, Bogra, and Dinajpur districts.

(b) No.

(c) Illicitly prepared in this district, but the quantity is very small.

15. Only from cultivated plants different sorts of ganja is manufactured. I do not know much about the preparation of ganja and charas. Siddhi or bhang is prepared illicitly from the wild plants. The leaves are removed from the plants when they are flowering and then dried in the sun. After the process it is powdered and drunk after mixing it with water, milk, sugar, and spices. Ganja and charas are only smoked, generally after mixing with tobacco.

16. (a) Prepared to a very small extent in this district.

(b) Yes.

(c) No.

17. Ganja is prepared by the ordinary cultivators, both Hindus and Muhammadans. Siddhi is illicitly prepared by all classes of people who drink it. I do not know what classes of people prepare charas.

18. Yes, these drugs deteriorate by keeping, and quite lose their effect in time. Ganja and siddhi keep good for two to three years and charas four to five years. The evaporation of the narcotic matter is the cause of deterioration. If the drug is kept hermetically sealed in tin boxes, I think it might prevent deterioration.

19. Used only for smoking, as far as I know.

20. Charas used to be smoked by both the upper and lower classes of people, but now its use is almost confined to a limited number of the latter. The consumption of charas in this district is not more than thirty seers per annum and the number of smokers of this drug is not more than three hundred. Ganja is smoked generally by people of the lower castes who have much outdoor work, such as boatmen, fishermen, and coolies, and a limited number of the upper class in the Barasat subdivision. I think about 75 per cent. of the adult population of the labouring lower class of people smoke ganja.

21. In this district round ganja is preferred. Flat ganja is not used at all. The consumption of chur is very little.

22. Foreign, Nepal charas, imported from Amritsar, is chiefly used.

23. Not as far as I am aware.

24. Bhang drinking is prevalent among all classes of people. It is specially used by the inhabitants of Behar residing in this district. I think about 50 per cent. of the people drink siddhi or bhang.

25. The annual reports show that the consumption of ganja is falling off year by year. The consumption of siddhi shows an increase. In charas the increase of consumption is nominal.

The vendors of this district formerly used to obtain charas from Calcutta retail shops in small quantities, but now they are importing it direct from Amritsar and are selling it wholesale to the vendors of other districts.

	Ganja.		Siddhi.		Charas.	
	Mds.	Srs.	Mds.	Srs.	Mds.	Srs.
1888-89 . . .	185	35	37	31	...	...
1889-90 . . .	163	19	43	9	...	...
1890-91 . . .	172	29	46	5	0	25
1891-92 . . .	177	2	56	29	0	31
1892-93 . . .	173	26	6	0	26	1

26. (a) 70 per cent.

(b) 4 "

(c) 25 "

(d) 1 "

27. These are mainly taken from the lower castes who have a good deal of rough out-door work, such as Bagdi, Podh, Behara, Chamar, Malla, Dhangar, Dulia, Dome, Mehtar, Boistab Sanyasi, songster, Kaibarta, etc. They are generally moderate consumers.

	Ganja.	Charas.	Siddhi.
28. (a) ■ annas weight,	3 annas weight,	1 tola,	
price 2 pice.	price 1½ annas.	price 2 pice.	
(b) 1 tola,	1 tola,	2½ tolas,	
price 4 annas.	price ■ annas.	price 5 pice.	

29. (a) Ordinarily with ganja and charas prepared tobacco is mixed, and with siddhi spices, sugar and milk.

(b) I am not aware of anything exceptionally mixed.

I have heard that dhatura seeds are used with ganja to increase its intoxicating power, but I have not seen any one use it. In case of tobacco with charas and ganja to soften the narcotic effect and to give a better flavour. Spices, etc., are used with siddhi to improve the taste and also to increase its intoxicating effect.

I know of no preparation such as bhang massala.

30. (a) Ganja and charas are smoked generally in company. No privacy is observed in case of drinking siddhi.

(b) It is mainly confined to the male sex and not to any special time of life.

(c) No.

31. (a) Yes.

(b) Yes.

(c) Not to the same extent as alcohol or opium.

32. The consumption of ganja and charas is not required by any social or religious custom. Bhang is drunk partly as a religious and more as a social custom on the fourth or last day of the Durga puja, as it is believed that success in life results thereby, and the name itself "siddhi" implies success. It is popularly believed to have been the favourite drink of Siva and is therefore given as an offering to him by devotees. The use is generally temperate and there is no likelihood of its leading to the formation of habit.

33. The smoking of ganja is held in disrepute, but such is not the case with siddhi drinking or charas smoking. The sentiment against ganja smoking is, I think, due to the fact that its use is confined generally to the lower castes. I am not aware of any custom of worshipping the hemp plant on any occasion by any sect of people.

34. Yes. The labouring class of the population use ganja or charas as a stimulant to enable them to do hard work. They cannot possibly give up the practice without some substitute. Bhang, again, could not be given up by the habitual consumers without aggravating the complaints, to prevent which they had recourse to its use. About 50,000 of the labouring classes of this district use ganja as a stimulant for hard work. There are no less than 10,000 habitual consumers of siddhi, but the charas smokers are not more than 300 in this district.

35. It is feasible to prohibit the use of charas, but not of ganja or siddhi. These two may be consumed illicitly; I doubt if the prohibition could be enforced with regard to them. The prohibition would occasion serious discontent among the consumers, but that would not amount to a political danger. The prohibition would be followed by recourse to other deleterious drugs.

36. Alcohol is to a very small extent substituted for these drugs amongst the better classes. As a stimulant, alcohol is considered as superior. The use of these drugs is gradually diminishing. Tari to some extent has taken the place of ganja among the lower class of people, for it stimulates and at the same time satisfies hunger, although a little costly.

37. Yes. The effect of charas-smoking is considered to be milder than ganja-smoking.

38. No.

39. Siddhi-drinking is less injurious than smoking ganja or charas. Smoking produces a strong instantaneous effect, but drinking is decidedly an easier method of consuming a large quantity at a time.

40. (a) Yes.

(b) Yes.

41. (a) Believed to be both.

(b) Yes.

(c) Yes.

(d) The use of ganja is supposed to enable a man to concentrate his mind on a subject.

Labouring class, 75 per cent. of them. The moderate use is referred to.

42. The moderate use is harmless as it has no after-effect on the system.

43. Yes.

44. (a) It invigorates and causes a pleasant feeling of intoxication.

(b) Yes.

(c) Yes.

(d) No.

(e) Yes, it does when taken in the form of siddhi.

(f) One hour in case of ganja and charas and three to four hours in case of siddhi.

(g) No.

(h) Produces longing in case of habitual consumers.

45. (a) No.

(b) In case of intemperate use it does.

(c) No.

(d) Yes, in the case of intemperate use.

(e) No.

(f) The moderate use does not deaden the intellect or produce insanity. It is said that adulteration of the drugs with other poisonous ingredients, such as dhatura, etc., produces insanity.

(g) It has been ascertained that of the insane

persons in the district, only nineteen are considered to have become so by the use of ganja. Of these nineteen, only one is reported to be violent. On sufficient enquiry, and as well as from the confession of the insane, it was elicited that in the majority of cases their insanity was due to other causes, such as family misfortune, etc., and some have taken to ganja after being insane. In four cases no other cause for their insanity could be ascertained except the excessive use of the drug.

46. Habitual excessive indulgence causes the peculiar frenzy which causes orientals to run amuck.

47 and 48. No.

49 and 50. (a) Yes.

(b) It is used so by the lowest class of prostitutes who frequent melas or fairs.

(c) I am not aware.

(d) No.

51 to 55. No.

56. I have no personal knowledge of the admixture of other substances than what I have already noted.

57. I do not know that ganja and charas are eaten or drunk.

58. The excise administration in respect of hemp drugs is working well, and I am not prepared to suggest any improvement.

60 and 61. I think that there is sufficient control and have no suggestion to make for the modification of the system.

62. I would not suggest any changes in this respect.

63 and 64. No.

65. (a) Yes.

(b) Yes.

66. Yes; for flat and round have twigs which the chur has not. Each kind of ganja should be taxed in proportion to the narcotic matter that each is found to contain.

67. Yes, as remarked above

68. There are licensed shops for the sale of these drugs, but ordinarily they are not smoked or drunk on the premises. The shops are not disreputable. Generally *mudi* shopkeepers are the licensed holders of these shops.

69. Ordinarily the wishes of the people are not consulted or considered when a shop is opened in any locality. On the application of vendors and local inhabitants licenses are granted after due enquiry at the auction settlement held with the sanction of the Board. I do not think it is necessary to consult or consider public opinion as these shops are not a nuisance.

70. There are no facts regarding importation or smuggling of hemp drugs from Native States.

Yes; duty is paid in respect of ganja and charas, but not of siddhi. The latter is used to some extent illicitly, but the use is not general.

58. Evidence of BABU PROKASH CHUNDER ROY, Excise Deputy Collector, Patna.

1. My connection with the Excise Department runs from 1878, when I was appointed as Excise Inspector of the Patna Division. In 1885 I was appointed as Excise Deputy Collector. In both these appointments I had ample opportunities to

obtain information on hemp drugs. From my own experience, from statistics collected and from inquiries made, the following replies are recorded.

2. The definitions given by Dr. Prain may be accepted for this province (Bengal).

The local names of the different kinds of hemp are as follows:—

- (a) Bhang, (b) Charas, (c) Chipta (flat) ganja, (d) Gol or pamri (round) ganja, (e) Chur or rorha (broken) ganja, (f) Majum.

3. In all the Behar districts, Patna, Gaya, Shahabad, Muzaffarpur, Darbhanga, Saran, Champaran, and Monghyr bhang plants grow spontaneously. In the last two, bhang grows spontaneously and in abundance. We used to get our supplies from Monghyr, which produced good bhang. We now get our bhang from the Bahraich district in the North-Western Provinces. Ganja does not grow wild.

4. Hemp has two names, (a) ganja, and (b) bhang. The former (ganja) at a certain age throws up *jatá* or flowering tops in compact forms, while the latter has no *jatás*, being composed of separate leaves. The smell of the two plants differs.

5. These plants generally grow in temperate climate and moist soil.

6. Ordinarily wild hemp grows very dense.

7. (a) Ganja is produced in parts of Dinajpur and Bogra, but principally in Naogaon, Rajshahi.

(b) No charas is produced in this province.

(c) Bhang used to be obtained from Monghyr. Latterly we have been obtaining our supplies from Bahraich, North-Western Provinces.

(d) Not known.

Majum made of bhang everywhere.

The extent of production is not known.

8 to 11. Not known.

12. There is no reason to suppose that wild bhang is specially cultivated for the production of ganja.

13. The cultivation of the ganja plant is restricted to Naogaon in Rajshahi and parts of Bogra and Dinajpur, because the soil is suited and produces the best kind of ganja in India. The cultivation of ganja plant is possible in almost every place in Bengal, but the produce will not be as good as that of Naogaon. We made experiments with ganja produced in the Howrah District, but the consumers did not like it. The intoxication was not as effective as Naogaon ganja.

14. (a) Ganja is prepared in Naogaon, Rajshahi, and parts of Dinajpur and Bogra.

(b) Charas is not prepared in this province.

(c) Bhang is prepared in Monghyr.

Majum made everywhere.

The extent of preparation cannot be stated.

15. (a) Different kinds of ganja are prepared in the manner described by Dr. Prain.

(b) Bhang or wild hemp requires no special care or preparation. When sufficiently advanced, it is cut, dried, and the leaves are stored.

A.—Ganja is smoked. Never eaten or drunk, except when used in lieu of bhang. The twigs

and leaves are taken out from the actual flower. Pounding is then necessary. The flower is put on the palm of the left hand and pounded by the right thumb. The pounded stuff is then enclosed in a piece of dried tobacco leaf. Thin slices are then made by a sharp knife. It is then pounded a second time, so that a thorough mixture of the tobacco is made with the ganja. When thus prepared, it is placed in a long chillum or bowl and smoked by the application of fire. Sometimes small hukas are used. Charas is also smoked by the addition of a little prepared tobacco (or tobacco with molasses) in the chillum.

B.—So far as is known, these drugs are never eaten, except ganja, which is eaten with bhang balls.

C.—Bhang is drunk, never smoked. It is pounded by means of a small round rod being turned over and over again in a thick stone cup. Often a little water is placed with the bhang. Sugar, milk and spices are then applied according to the taste of the consumer. It is then eaten in lumps or turned into liquid by addition of more water. This liquid stuff is then drunk after being strained on a piece of cloth.

D.—Majum is prepared by frying bhang leaves in ghi, the proportions being equal. The extract of bhang thus obtained is then mixed with sugar, the proportion being 1 to 16, i.e., for a seer of sugar, one chhatak of extract of bhang is required. When this mixture is brought to a proper consistency by slow firing, the stuff is made into cakes for sale in the bazaar. The rate of sale is one rupee to the seer.

16. Bhang is prepared for use generally by the people in their houses. It can be prepared from the wild hemp plant wherever grown. But ganja or charas cannot be so prepared.

17. By all classes.

18. Ganja and bhang deteriorate by keeping. Nothing is known of charas. Both ganja and bhang lose their effect in time. With ordinary care they keep good for two years. Damp and exposure are the chief causes for their deterioration; spacious godowns, all tinned, and raised platforms made of planks are necessary to save them from early deterioration.

19. Besides smoking, ganja is used for medicinal purposes. Both in Bengal and Behar ganja is used for an ointment for skin diseases. It is prepared with oil, camphor, etc. Ganja is sometimes prescribed for cold, but charas is never used as a medicine.

20. All classes of the people smoke ganja. Charas is not used here. Hindus consisting of Gawalas, Kahars, Kurmis, Kayasths, Rajputs, and Koeris smoke ganja to a very large extent. Next come in low-class Musalmans. In a hundred consumers, 11 are Gawalas, 10 Kahars, 9 Kurmis, 7 Brahmans, 7 Musalmans (*vide* table appended). In towns the consumption is largest. Ganja is greatly in demand where the climate is damp.

TABLE (*Vide* REPLY TO QUESTION No. 20).

Statement showing the percentage of different classes of ganja and bhāng smokers in the Municipality of Patna.

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	■	■	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	
Drugs.	Gawlas.	Kabars.	Karmis.	Brahmas.	Musalangs.	Reputis.	Koetis.	Kayasths.	Fakirs.	Sonars.	Mullabs.	Babbans.	Tols.	Hajjans.	Bannias.	Kulwars.	Mektars.	Barkis.	Halwais.	Doedhas.	Tumolis.	Sundis.	Kandus.	Lohars.	Dhobis.	Chamars.	Muchars.	Nariars.	auls.	Bundholes.	Bundals.	Pasis.	Bunpars.	Dhanaks.	Giraries.	Nicarars.	Amudgars.	Koersars.	Kumhars.	Khatris.	
Ganja	11	10	9	7	7	8	5	5	4	3	3	2	2	3	1-3	1-2	1	1	1-6	1-2	1-6	1-6	1-5	-3	-5	-3	-6	-6	-4	-3	-3	-4	-3	-4	-3	-1	-1	-6	-1	N/A	
Bhang	18	14	9	7	10	2-5	7-6	5	9	5	1-3	...	9	-6	1-3	3	-6	-6	...	-6	...	-3	-6	2	2	-6

This statement is made up from statistics collected in the shops within the municipality.

21. Flat (chipta) ganja is preferred for smoking. The preference generally depends upon the duty fixed for each kind and the price demanded thereof.

22. Charas is not used in this district. Good charas is said to be imported from Herat.

23. Bhang is never used for smoking.

24. Bhang is used by all classes of Hindus, especially Babbhans and Marwaris. In a hundred consumers there are fifty Babbhans and ten Marwaris. It is generally and mostly used in towns, because bhang very rarely sells in the mufassal.

25. The consumption of ganja has decreased owing to the increase of duty. Particulars for charas are not known. The consumption of bhang appears to be on the increase owing to the fact that there has been no increase in the rate of duty on this drug, while duty on ganja has been raised considerably from time to time.

26.		
	GANJA.	BHANG.
(a)	48 per cent.	10 per cent.
(b)	28 "	15 "
(c)	17 "	50 "
(d)	12 "	25 "

These informations have been recorded from statistics collected in the ganja shops and from enquiries made of ganja vendors.

27. In reply to No. 20 I have given the castes which use ganja. They are mostly poor men and day-labourers, who either from religious prejudices or on account of want of sufficient means cannot use liquor. This and also reply No. 20 are made from statistics recorded by the vendors and from enquiries made by me.

GANJA.		BHANG.	
Allowance.	Costs.	Allowance.	Costs.
(a) 8 grains	$\frac{1}{2}$ anna.	45 grains	$\frac{1}{8}$ anna.
(b) 64 „	2 annas.	90 „	$\frac{1}{4}$ „

These figures have been obtained by enquiry.

29. In ganja, khaini or dry leaf of tobacco is ordinarily used. In exceptional cases, if the consumer can afford it, attar is used. With bhang, anise and pepper are ordinarily used. In exceptional cases, milk, sugar, and spices are used. It is said anise and pepper give taste and flavour to bhang, but milk and sweets make it more effective. Dhatura is rarely used. Ingredients of bhang massala are given below :—

Bhang massala is sold by the Banias for being

mixed with bhang. Its ingredients are as follows:—

(a) Anise, (b) pepper black, (c) cucumber seeds, (d) kakri seeds, (e) khurbooza seeds, (f) Kaho-Lactuen sativa, garden or Roman lettuce, (g) kurfu, (h) rose leaf, (i) chota ilachi (small cardamom), (j) kasni.

30. Excepting the habitual excessive consumers of ganja, all the other consumers of ganja or bhang use the drugs alone. The use is confined mainly to the male sex, but not to any time of life. Children sometimes use ganja, but not bhang.

31. The habit of consuming ganja and bhang is easily formed. Say ten days' use will create the habit. But it is not difficult to break it off. There is a tendency to increase the dose as habit grows up. This reply is made from informations collected and from experience.

82. In these provinces no customs, social or religious, are known in which ganja is essential. Bhang is used during Durga puja in Bengal, and it is placed on the Mahadeo during Sivrat in Behar. The use in Bengal is generally temperate, and does not lead to the formation of the habit or is any other way injurious.

33. The consumption of ganja is generally disapproved, because the habit makes a man unfit for active life, unless he has rich and substantial food to counteract the effect. Public opinion is against it. Even the poor consumer looks it down. Not so the consumer of bhang. The hemp plant is never known to be worshipped.

34. It would be a serious privation to the sadhus and fakirs who come from all classes, because their habit is formed by using the drug for years together. It would be also a privation to the Bhagats, who cannot have recourse to liquor as an alternative on account of religious prejudices. In a hundred consumers, four fakirs and nine Bhagats would thus be affected.

35. It would be feasible to prohibit the use of all these drugs by gradually raising the tax on them. There may be some illicit consumption wherever there is any possibility of illicit cultivation. Prohibition may create discontent, but not serious, nor amounting to political danger. In rare cases prohibition will be followed by recourse to alcohol, because the price of liquor acts as a deterrent. In many cases the consumers shall have recourse to kankur made of dry tobacco leaves and prepared tobacco, heated and then smoked.

36. There is no reason to believe that alcohol is used in lieu of these drugs, because the latter are cheaper.

37. The effect is the same, but the smell of charas is sweeter. I have smelled both.

38. The same effect.

39. Ganja smoking is less injurious than eating or drinking the same, because the whole quantity of smoke drawn cannot be retained. In smoking, a portion of the intoxicating power is wasted in the fume thrown out, and another portion is burnt, while the whole power acts within when eaten or drunk.

40. Old bhang is often used by hakims and baidis for diseases of the stomach. Bhang is often used for cattle diseases. Ganja is sometimes used as a medicine for skin diseases, but majum and charas are never used as medicines.

41. (a) Moderate use of ganja and bhang after meals is said to be beneficial as a digestive to those who have made it a habit.

(b) Moderate use is considered by the consumer to give staying-power under severe exertion or exposure, and also to alleviate fatigue.

(c) Ganja is said to be a preventive of fever in marshy places.

(d) Bhang is often used as a preventive of diarrhoea.

Bhang is used as a digestive by all classes who use it either habitually or occasionally after a meal. Ganja is considered a febrifuge both by the occasional and habitual smoker.

42. Moderate use of these drugs has never to my knowledge produced any harm. I have seen persons who were ganja smokers from their childhood to their old age to use it without any visible harm.

43. I have never seen a moderate ganja smoker to be offensive to his neighbour, except that he sometimes uses high words and talks too much under its influence. I have seen, however, some persons (occasional consumers) to be troublesome and boisterous under the influence of bhang.

44. The immediate effect of ganja on the habitual moderate consumer is constriction of his throat and a reeling sensation in the head. It is refreshing to those who use it habitually. It produces instantaneous intoxication, which seldom lasts more than three hours. The beginner has appetite, but the habitual smoker does not feel any appetite. The only after-effect to a habitual smoker is yawning. It produces a longing for further use of the drug. A consumer of bhang or majum has to wait for half an hour before he perceives the effect. It has refreshing effect. It produces intoxication, which lasts three to four hours with the habitual consumer. It creates appetite in the beginner. There is nothing unusual in its after-effects, but want of subsequent gratification produces a longing and creates uneasiness.

45. Habitual moderate use of bhang does not produce any noxious effects, physical or mental. It may have effect on his moral nature. As regards ganja, I have never seen a fat ganja smoker unless he has means enough for rich food. Ordinary smokers are lean and without any flesh. It has the most obnoxious effect when the consumer has no means to satisfy his hunger with good substantial food.

It does not injure digestion, but it is accelerated by its use. If taken before a meal, it will cause

loss of appetite. It is said that its habitual and excessive use causes dysentery and asthma. But I have not seen any person suffer such diseases from the use of ganja, nor have I seen any one turned insane from the effects of ganja smoking.

46. Excessive use of ganja or bhang may lead to insanity, but I have not known any such case.

47 and 48. The habit of smoking ganja or drinking bhang cannot be said to descend to future generations unless the children see and partake in the use of the drug by their parents.

49. I have never heard it practised as an aphrodisiac. On the contrary, all the fakirs that I have consulted have informed me that it is a preventive of lust, or, in other words, ganja smoking diminishes the desire for sexual intercourse. I have never known a case of impotence specially caused by the use of ganja or bhang.

50. Excessive use may cause all the evils mentioned above.

51 and 52. (a) No.

(b) I have never heard crime to have been produced by moderate or excessive use of these drugs. Experienced Police and Excise officers are of the same opinion.

53. I have never heard that unpremeditated crime has been caused by excessive indulgence in any of these drugs, nor of any case in which it has led to temporary homicidal frenzy. Experienced Police and Excise officers do not attribute crime to ganja or bhang.

54. These drugs have never been heard to be used by criminals to fortify themselves to commit a premeditated act of violence or other crime.

55. I have never heard of a case of stupefaction by the use of any of these drugs for the purpose of committing any crime. By using a large quantity of ganja or bhang, stupefaction can be induced without any admixture.

56. I have never known a case of admixture with other substances of ganja. Sadhus sometimes use a little quantity of ganja with bhang balls. Sometimes dhatura is so used by the sadhus in order to increase the effect of intoxication.

57. When ganja is eaten or drunk, the effect of intoxication lasts longer.

58. Working well.

59. No license fee is imposed for selling hemp by wholesale dealers who make large profits. This may be done in future years.

60. Nothing to suggest.

61. Charas is not produced in this province.

62. If production of ganja could be prohibited, I do not see why bhang could not be so prohibited. In fact, it was prohibited by Excise Commissioner's Circular No. 6075, dated the 26th January 1893, but the circular was withdrawn. Strict orders on the Police and on the Excise preventive staff would enable us to enforce the prohibition.

63. For wholesale vend of ganja and bhang there is no license fee. The ganja and bhang goladar should pay a moderate license fee for his wholesale business, just as a wholesale dealer of imported liquor does. This is the most convenient way to raise the tax levied on ganja, and consequently the selling price of ganja in the market. At present one pice worth of ganja weighing 8 grains, or half a pice worth of bhang weighing 45 grains, is quite enough for a moderate habitual consumer. A quart bottle of khasia liquor of 85

under-proof strength will cost at least one anna, and this quantity of liquor is not considered enough for a moderate drinker. So that if the tax on ganja and bhang is doubled, and the selling price is made twice as high as it is now, these drugs will still be cheaper than country liquor, and there will be no danger of driving the consumer to the use of country liquor.

64. *Nil.*

65. Half a pice worth of bhang is sufficient for a moderate consumer of bhang, while one pice is necessary as regards ganja and four pice as regards liquor. So that it is possible to raise the tax on bhang and ganja to twice as much as shown in reply No. 63.

66. Formerly one rate was in force, but in 1864-65, in order to equalise the incidence of the tax on the exciseable portion of the drug, the present system of charging different rates of duty was introduced. This is necessary, or else flat ganja would not sell. From one seer of flat ganja the vendor can sell only 9 to 11 chhattaks, and from one seer of round ganja 14 to 15 chhattaks. The

saleable ganja varies according to the produce of the year and the quantity of twigs in the ganja.

67. None.

68. No. There is nothing, however, to prevent people smoking ganja or consuming bhang in the shops where they are sold. As the public do not object, I have nothing to suggest.

69. When an application for a new shop is made, local enquiry is made by the excise subordinates and by the Excise Deputy Collector, if necessary. It is not necessary to consult public opinion as regards the localities of these shops, as they are considered perfectly harmless.

70. I had two cases in Champaran where Sadhus had brought with them small quantities of ganja from Nepal, where the drug is very cheap. But these were rare cases, and I do not think any extraordinary measure is necessary to prevent this sort of smuggling. A little more vigilance on the part of the Frontier Police and our excise detectives will put a stop to them. Very little of any untaxed ganja is used in this province, but such is not the case with bhang, which grows wild and can be had without any difficulty.

59. *Evidence of BABU PRAKASH CHANDRA SINGHA, Deputy Magistrate and Deputy Collector, Chandpur, Tippera.*

19. In this district, as far as I know, ganja is used only for smoking.

20. Lower-class Hindus, such as Charals and Kaibartas, in Tippera smoke ganja.

27. In North Tippera, some years ago, some ganja smokers introduced a kind of worship called "Trinath's puja." Smoking some ganja was an essential part of the worship. This became a favourite amusement of the low-class Hindus, and I knew many lads learn ganja smoking in this institution. The institution is now becoming unpopular.

30. Smoking ganja is mainly confined to the male sex. It is not usual for children to consume ganja.

31. When the habit has once been formed it is difficult to break it off. I had some tenants who took to smoking and got into the habit. They tried to break it off, but were unsuccessful.

32. Answer given in connection with question 27. In the worship of Trinath, smoking ganja is essential.

33. With the higher classes all forms of narcotic, except tobacco, are in disrepute.

34. As smoking ganja does not do anybody any good, I do not think there would be any serious privation to any class of consumers to forego the consumption.

35. I do not think the prohibition would lead

to any political danger. It is only the worthless among the community that use the drugs.

45. Yes, it does. I know two lives which I studied. They were both moderate smokers of ganja. One was a strong man and the other of a weakly constitution. As the strong man went on smoking he gradually became idiotic and idle, and lastly he died vomiting blood. The weaker of the two preserved his intellect till he died, but he too died vomiting blood, probably due to disorder of lungs caused by ganja smoking.

46. Moderate use produced the effect noted in answer to question 45. It took some time to produce the effects noted, and excessive use is likely to produce them in a much shorter time.

47. Not hereditary in either of the two instances noted (45).

48. Excessive use can produce in a shorter time the evils noted in answer to question 45.

51 and 52. As far as I know, there is no connection between the two. There are more criminals amongst Muhammadans than among Hindus; but I think there are more ganja smokers among Hindus than amongst Muhammadans.

53 and 54. None has come to my knowledge.

69. In these matters local public opinion should invariably be obtained. I knew of places where opening such shops was considered objectionable by the higher classes of people.

60. *Evidence of BABU SURENDRANATH MOZOOMDAR, Brahmin, Special Excise Deputy Collector, Monghyr.*

1. Experience gained from personal observation, personal knowledge and inquiries instituted through subordinate agency in the Excise Department.

2. Dr. Prain's definition may be accepted for bhang. I have no personal experience of the manufacture of charas and ganja, but, as far as I know, the definitions are correct. Bhang grows wild in the district of Monghyr, and both male and female plants are collected under that name.

Bhang is locally termed here for siddhi, subji, atti, etc.

3. (Answer refers to bhang only.)

I have seen bhang grow wild in the following districts (1) Muzaffarpur, (2) Bhagalpur, (3) Monghyr. It is abundantly grown in the last-mentioned districts.

4. Bhang.

5. Districts of Monghyr and Bhagalpur. The climate is temperate, soil alluvial with basaltic rocky formation in the southern portion of the districts. The growth is scanty in the latter

part. Rainfall ordinary. Elevation above sea-level slight. I do not consider any special conditions are necessary for the growth of bhang.

6. Scattered. Ditches, earthen boundaries and fallow lands being the ordinary places where it grows. Germinates generally in October and is ready for use in six months.

14. (Answer relates only to bhang.)

Bhang is prepared here (Monghyr district) annually to the extent of 300 maunds.

15. Bhang is prepared here from the wild plants. In April or May the plants are cut off and left to dry in the fields for about a week. The leaves are then shaken off the twigs (stem) and collected. The seeds are separated as far as possible. The dried leaves are then carried to warehouses as being fit for the market.

Preparation for eating.—Leaves soaked in water for a few hours and then ground to paste in a jar with spices, *viz.* aniseed, seeds of cucumber, pepper and sometimes endives. The paste is swallowed in the form of balls.

Drinking.—The above when mixed with water, sugar, or rose-water and milk, forms drink.

Ganja is smoked with dry tobacco leaves, both being pressed together.

16. (a) Yes.

(b) Yes.

(c) No.

17. There is no particular caste who prepare bhang.

18. Bhang loses its intoxicating effect by keeping, and quite loses it in more than five years. Old bhang is used rather for medicinal purposes than as intoxicant. Ganja also loses effect by keeping, and at the same time old ganja is considered injurious to constitutions. Scientific causes not known. Preservation from air and damp may prevent deterioration for some time.

19. Ganja and charas are only used for smoking. Ganja—exceptional cases—eaten, being ground to paste, or boiled with milk, the butter prepared from the cream being used with relish as opium-eaters do.

20. *Classes*—Rajputa Bahbans, Agarwala, banias, fakirs or sadhus, and labouring classes, *e.g.*, Kahars, Nuniyas, Dhanuk, etc.

Thana.	Population.	Annual consumption.	No. of daily smokers.	Percentage.	REMARKS.
		Mds.			
Gogree .	382,000	43	1,900	5	The figures have been obtained thus: (1) we have the following hypotheses, <i>viz.</i> , the number of 2 annas (habitual excessive) consumers is $\frac{1}{4}$ th the number of 2 pice consumers (habitual moderate). The sale proceeds of every shop is known, the daily consumption being known. If x is the number of habitual excessive consumers, then $2 \text{ annas} \times x + 2 \text{ pice} \times x = \text{daily sale proceeds (known quantity)}$. This has been verified by checking the statistics and the numbers reported from different shops.
Beguserai .	400,000	40	1,400	35	
Tegra .	218,000	18	800	36	
Jamalpur .	22,000	3	140	06	
Monghyr .	142,000	14	620	43	
Kharakpur .	148,000	17	750	49	
Jamui .	116,000	14	620	49	
Sikandra .	114,000	10	350	5	
Shekपुरa .	196,000	18½	825	41	
Chakai .	117,000	2½	90	07	
Surujgudha .	168,000	30	1,050	62	
TOTAL .	2,023,000	210	8,535	42	

21. Chur ganja is preferred. No marked distinction in different localities.

22. Charas is rarely used. People who do smoke get from Calcutta shops; travelling Kaulis sell charas clandestinely.

23. Bhang seldom used for smoking. The lower classes sometimes take fancy to smoking bhang, but instances of this are few.

24. No statistics can be obtained on this subject. About 100 maunds are consumed annually in this district, part of which (about 80 maunds) goes taxed. The classes of people that use bhang are—

(1) Rajputs and Brahmins;

(2) Khatriis;

(3) Bania and Agarwala.

Bhang is not used much by the lower classes as the preparation is rather costly. In my opinion about one per cent. of the population drink or eat bhang, but this estimate is based on conjecture, as bhang is consumed by people in their houses which they procure from fields.

25. From the statement of people examined by me on the subject the number of ganja-consuming people has been on the increase in some places, but quantity consumed is on the decrease. Specific instances have been noticed by me. The total consumption (as evident from the figures of consumption) is on the decrease. This is due to the rise of duty levied on the drug; on the whole therefore the consumption of ganja is on the decrease and the consumption of bhang constant.

26. (a) Habitual moderate 80 out of 100 consumers.

(b) Habitual excessive 20 out of 100 consumers.

(c) Occasional moderate } No approximate figures can be given. An occasional moderate smoker would rest content with one pice worth of ganja for four days. An occasional excessive smoker is a phenomenon. None is reported. Excessive smoker is always habitual smoker. For the purpose of simplifying my calculations I have included occasional moderate in the category of habitual moderate. An occasional smoker of this class I consider = $\frac{1}{4}$ th of habitual smoker.

27. The classes of people are :—

(1) Rajput Bahbans and Brahmin agricultural class who cultivate fields by manual labour.

(2) Banias, Agarwalas and Khatriis, trading classes.

(3) Kahars, Dhanuks, Nuniyas, and other labouring classes.

(4) Sadhus and fakirs, religious mendicants.

NOTE.

Out of 100 consumers 20 belong to (1), 10 to (2), 65 to (3), 5 to (4). (4) Consume excessively. (3), (2) and (1) moderately.

28. Ganja—

Allowance.	Cost.
(a) $\frac{1}{4}$ of one tola.	$\frac{1}{2}$ anna.
(b) $\frac{1}{2}$ tola.	2 annas.

Bhang—

(a) 1 tola.	1 pice.
(b) 1 chhattak.	4 pice or 1 anna.

Only average figures have been given by striking out the mean of different statistics obtained from different localities.

29. With ganja.—Hingli or dry tobacco leaves. Well-to-do consumers mix rose water or otto of roses to impart fragrance. The object is to reduce the strength of the drug and make it more palatable.

With bhang—(1) cucumber seed, (2) aniseed, (3) pepper, (4) endive. In other cases, sugar, milk and rose-water to make the preparation cool and palatable. Chimney smoke (jhul) is sometimes mixed with bhang to strengthen the intoxicating properties.

30. Ganja and bhang consumed generally in company. Females of Sadhu class consume, but rarely other females; except for medicinal purposes. Children don't use it.

31. Ganja.—Habit formed in a year or two. It is not difficult to break off. However, for excessive habitual consumers it is difficult. Instances where it has been broken off are found everywhere. There is tendency to develop into excessive, but this does not generally take place for pecuniary circumstances of the consumer. The tendency therefore may be considered as moderate.

Bhang.—The same remarks apply, but to a less degree.

32. There is no religious or social custom enjoining the consumption of bhang or ganja. Rather physical or moral reasons mixed up with prejudice may be ascribed. Ganja is used as an offering at the altar of Siva by common people. Bhang is consumed generally at the Dassehra as an emblem of rejoicing.

33. Consumption of ganja is regarded as unusual. Bhang is considered rather efficacious than harmful. As febrifuge both are regarded efficacious. By religious mendicants ganja is regarded as essential for religious meditation and concentration of physical and mental energies. Bhang is popularly believed to impart strength to strong and active men, best for sexual enjoyments, and religious meditation to devotees. Ganja is held in disrepute by the people; the sentiment may be ascribed to the injurious results it imparts on the constitution.

No custom of worshipping hemp plants prevails here.

34. Ganja.—It will be a serious privation to the sanyasis, sadhus and fakirs to forego ganja. This will not only entail serious physical privations (because ganja is considered as a preventive of damp, exposure and fatigue), but will be considered as an interference with their religious meditations. The number of this class is about five hundred in this district.

Bhang.—No serious privation is apprehended, but will be looked with dissatisfaction by the consumers, who consider this as an effective febrifuge and mild and cooling intoxicant.

35. (a) I don't consider it feasible to prohibit the use of any of these drugs.

Ganja.—For checking consumption the duty may be raised, and this will reduce the number of consumers gradually, but even this will not be regarded with satisfaction by sadhus who live on the charity of other people.

(b) It is possible, but not probable in this district.

(c) and (d). Prohibition would cause serious discontent amongst religious mendicants, but can be easily enforced by stopping importation altogether by legal and executive measures.

(e) Not in this district.

(f) No, except the lower classes who have been found to change one intoxicant for another.

Bhang.—It is not feasible to prohibit as it is harmless and not used excessively.

36. Cases are found where for the high prices of ganja a few persons have abandoned it and taken to liquor. I have found specific instances of this in some localities.

37. Charas is never smoked apart from admixture of tobacco (*vide* question 15). The initiatory process reduces the keenness of the drug, hence the intoxication is milder than ganja. It takes effect after a minute or two have elapsed (from the time of drinking). The eyelids are affected first. Light becomes unbearable. The saliva dries up. The patient becomes sensitive and looks at everything with satisfaction. Capacity of hearing increases, and music produces a very soothing effect. Excessive smoking produces stupefaction of energies. In ganja the patient is affected immediately. The symptoms are the same as charas, but they are keener. When the intoxication overpowers the man, he thinks himself in danger and led away in clouds. Breathing becomes hard; it is remarkable that consciousness is never lost. I might say it rouses the subconscious part of a man's nature. There are lucid moments when the patient strains hard to recover his energies, but he fails. Coma is produced at the extreme stage. My conviction is that it rouses the hidden part of a man's nature. A jolly man becomes jolly and musical, a religious man becomes meditative, an athletic will think of his strength, and a criminal thinks of his own look-out, and a quarrelsome man becomes peevish and is ready to fight.

38. Bhang produces an intoxication milder than charas if consumed in a small quantity. It acts differently on different constitutions. In some it produces a garrulous tendency, others take to laughing and hilarity. In exceptional cases it brings on deep slumber. I cannot find any distinguishing features in the respective effects of the three drugs which is worthy of note. The difference is one of degree and not in kind. The state of the mind is passive, whereas in alcohol it is active. In the former case the imagination is creative, in the latter constructive.

39. No difference is found in bhang. Eating ganja is more injurious than smoking. Evidence of a sanyasi was taken by me. He cannot state the reasons.

40. Ganja is prescribed in the following diseases:—(1) Rheumatism. (2) Female organic diseases. (3) To prevent damp and malarious fevers.

Bhang.—(1) In diarrhoea. (2) In cattle disease.

Bhang mixed with gur is given to horses and animals to allay fatigue and effects of over-strengthening of nerves.

41. (a) Moderate. Charas, ganja, and bhang.—They are thought so, and I think it is true to some extent.

(b) Ganja.—Yes. Unanimous opinion of labouring classes on the subject.

(c) Ganja.—There is no general opinion, but North Gangetic people living in damp and malarious tracts think so. The people of Purnea around the Kosi banks use ganja largely for this purpose. I got fever once in the interior. On the next occasion on taking ganja I did not get

any fever. This may be accidental, because I have seen people getting fever who take ganja.

I only refer to moderate occasional use. They are all labouring classes; and, I think, 50 per cent. of the male adult population in particular tracts of this class use ganja. Bhang is also considered when habitually, but moderately, used as suppressing cravings for lust. In this way it is used by darwans, sepoys, and constables, who are bachelors, or, being married men, do not meet their wives often.

42. Ganja and bhang.—Moderate use is harmless if proper food is available. I found habitual moderate smokers of the cultivating class strong, healthy and possessing normal mental faculties.

43. Yes; they are inoffensive. Offensive men are always offensive even without the intoxication.

44. Ganja and bhang.—The immediate effect is said to be refreshing, which means a slight intoxication. It allays hunger for a habitual smoker but creates appetite to an occasional smoker. A habitual smoker, however, cannot digest his food without using it. The effect of one chillum lasts for half an hour. Want of subsequent gratification produces uneasiness to a habitual excessive smoker.

45. Ganja.—(b) It weakens the physique, gradually, but very slowly.

(c) It weakens the digestion.

(d) If moderately used, it does not, but without proper nourishment in any case it will.

(e) No.

(f) Not if moderately used.

In bhang none.

46. If excessively used (habitual) it impairs the constitution; causes entire loss of appetite. As long as the intoxication lasts, food may be swallowed to abnormal extent. It causes dysentery, bronchitis and asthma; produces laziness, but not immorality or debauchery (*vide* question 49).

In extreme cases only it deadens the intellect and produces insanity of permanent type if the use is continued. No instances have been noticed in which the symptoms have been reintroduced by use of the drug after liberation from restraint. In a case enquired into by me, I found that the insane person had suffered from some mental shock from the loss of wealth and other calamities. He then took to ganja. He is rather a monomaniac and always attempts to prove that he is Raja of Banaili. I have met some begging mendicants who did not reply to my questions. They accept no food, but accept money which they spend in smoking.

Excessive use of bhang is not common. I know of a wealthy banker in another district who for the excessive use of this drug remains dozing whole day long, and is not better than an idiot.

47. No.

48. Ganja.—Instances have been found where it has been found true, but there are also instances where the son of habitual excessive smoker does not smoke. No general rule can be laid down.

49 and 50. Ganja.—Sometimes used so, but rarely.

Ganja and bhang.—The unanimous opinion is that they tend to produce impotence if excessively used. If moderately used, the tendency is counteracted by the substantial food which the consumers take. Both produce a craving for dense

boiled milk, sweets, and confections fried in butter.

51 and 52. Not a large proportion; on the contrary I think very few bad characters are habitual moderate smokers of ganja. The intoxication of bhang and ganja rather produces a stupefaction and overpowering sense of fear of one's own safety. Habitual moderate smokers, of course, do not lose their mental faculties for the moment, but I do not think ganja is incentive in any way to crime. It may be found, however, that criminals sometimes take ganja, but that does not settle the question.

53. Ganja.—One case has been reported to me where an excessive habitual smoker killed his mother. The reason is that excessive indulgence tends to temporary insanity, which follows from habitual peevishness of temper and liability to sudden outbursts of passion common to smokers of this class.

54. No cases are known.

55. No cases are known. Stupefaction can be induced, but administration of ganja or bhang to a person not used to them is not easy, and opportunities are seldom found.

56. Ganja is always mixed with tobacco leaves before smoking (*vide* question 15). So charas (reply to *ibid.*) and bhang (reply to *ibid.*). Both in moderation and excess the actual effects are modified remarkably by these admixtures. The nauseating effects vanish and the acuteness of intoxication reduced; and dhatura is not used as an admixture in these parts.

57. I can give no more information than what I have done in reply to question 19. According to sanyasis, eating ganja gives more *chakur* (revolution or rotation, *i.e.*, intoxication) than smoking.

58 and 59. Ganja.—This district is concerned only with the consumption of ganja exports from Rajshahi under pass. The trade is carried on by wholesale and retail dealers. The selling price of ganja in the market is now equal to that of opium, and in my opinion an improvement may be effected in the present system by regulating the manufacture and trade of ganja in the same way as in the case of opium. A proper check against smuggling is to do away with the direct connection between traders and cultivators. The system as it stands at present has also a tendency to create undue competition resulting in the increase of consumption which is injurious. With the interference of Government the consumption may be effectually checked. The system I propose is this: Strict supervision and vigilance must be exercised on the cultivator and manufacturer of ganja by Government officers, a proper establishment being made for the purpose. The cultivators will receive from Government a proper price for the drug manufactured. The drug being stored in Government golas, indents will be sent from time to time by district officers according to local demand ascertained from licensed vendors. Direct connection between traders and cultivators being thus abolished and transit properly checked, it will remain with Government either to do away with the wholesale dealers or not. If they are retained, the ganja will be issued to them on payment of a certain rate for each kind, which will cover fixed duty, cost price, cost of establishment. The licensed dealers will then take from wholesale dealers. But I should not approve of introducing wholesale dealers; unless the licensed dealers deal directly with Government, the consumption cannot be restricted. It will remain

only to fix the tax and also the retail price. By properly tracing these the consumption can be checked within the described limits, the license fees being fixed with reference to the probable consumption of each shop.

62. Bhang.—It will not be practicable to control the production of bhang in this district where it grows wild. The recent attempt at extirpation of wild bhang for inducing cultivators to take license has proved a failure. Sufficient evidence has been taken as to the fact that bhang is only moderately used, and is not, as such, at all injurious. There is hardly any taxed consumption of bhang in this district. Much is collected for the purpose of exportation, and it is only necessary to frame stringent rules regulating collection and exportation; added to this the existing rules regarding the limits of licit possession will, I think, have the desired effect.

63. *Vide* reply to questions 58 and 59 for ganja. For bhang there is hardly any sale in the market, people getting their bhang from fields. I have recommended for the abolition of wholesale vend altogether in the case of ganja. In bhang, however, this cannot be effected, as any attempt to store wild plants in Government golas after manufacture will not prove successful. I don't think any cultivator will take out license for bhang, as the drug has hardly any price, and any rise in the price (*i.e.*, duty) will not make it more valuable, as it is less cared for, and the chance of smuggling from fields cannot be altogether got rid of.

64. *Vide* reply to questions 56 and 59. The export of ganja from Rajshahi is the only thing with which this district is concerned. The present rules are strict, but, as I have suggested, more safety can be attained by direct transit from the storing Government gola to that of the gola of the importing district.

65 and 66. Bhang.—I think the taxation is sufficient.

Ganja.—The taxation can be increased. Making 6 annas the retail price per tola of chur ganja, *i.e.*, Rs. 30 per seer, the taxation can be fixed thus:—

	One seer.
Retail price	Rs. 30
Cost price paid to cultivators by Government	1
Cost of transit, cost of establishment	2
Profit to licensed dealers	4
License fees incident on each seer	4
TOTAL	11

The tax may be raised to Rs. 16 per seer, leaving Rs. 4 to fluctuation in consumption, the gain to Government by this system being Rs. 25 per seer.

Since there is no marked difference of intensity in the intoxication which the different sorts of ganja produce, the proportion of twigs and stems only come in for consideration. The ratio between the different rates now prevalent is to my estimate fair. The same ratio may be retained on the event of a rise in duty.

67. Ganja.—The consumption being 210 maunds annually (in this district), the price paid by consumers at Rs. 20 per seer (average of three kinds) = $210 \times 40 \times 20 =$ Rs. 1,68,000.

Number of consumers 8,535 (average number of habitual consumers, *vide* question 20); the incidence of cost on each consumer is therefore $\frac{1,68,000}{8,535} =$ Rs. 19-7-0 annually, *i.e.*, about Rs. 20 = Rs. 1-10-8 monthly = Rs. 0-0-10 daily.

Bhang.—The greater portion passes into consumption untaxed, hence no figures can be given.

Ganja.—The revenue being a little over Rs. 90,000, it will be seen that about 50 per cent. of the cost paid by consumers goes to the wholesale and retail dealer, whose interests are for the most part one and the same. With the increase of competition amongst retail (or wholesale) dealers the drug is sold cheaper in the market, and increase of consumption follows. The incidence on the consumer is proportionately diminished. The question is to effectively tax the drug, so that the fluctuation of consumption may not be left at the mercy of the dealers. This may be done only by fixing the retail prices and adjusting the tax and license fees, which will restrict the consumption within the limits desired. This will also be beneficial for the revenue (*vide* note to questions 58, 59, and 65).

68. Ganja and bhang are not consumed on the premises of licensed shops.

69. The ganja or bhang shops are not a nuisance in any way, hence the wishes of the public are not consulted. The sites, however, are published before being set up to auction, and any objection voluntarily preferred is duly considered. This I think is sufficient.

70. There is no bordering Native State or foreign territory from which ganja is smuggled into this district. There are sometimes stray cases where pilgrims take with them very small quantities of Gurjati or Nepal ganja, but such cases are rare here.

61. Evidence of BABU A. K. RAY, Sub-Divisional Magistrate, Bangaon, Jessore District.

1. Have had knowledge of ganja-smokers from infancy; worked in Rajshahi in 1880; was Excise Deputy Collector in Tippera in 1891; have examined all classes of ganja-consumers and siddhi-eaters as Sub-Divisional Magistrate of Bangaon; have specially examined the Assistant Surgeon of Bangaon, the local gentry and the police officers in connection with this enquiry. Have personal knowledge of the habits of sanyasis and bairagies, who form a large class of ganja-smokers in Bengal.

2. Yes; charas is called charas; ganja, ganja; and siddhi is called siddhi locally. The word "bhang"

is occasionally used for "siddhi." A few men also call siddhi "katcha pati."

3. Rajshahi, Hill Tippera, and Orissa Tributary States. Abundant in these three districts. To a limited extent in 24-Parganas, Nadia, and Jessore.

4. "Siddhir gach" and "ganjar gach." The wild siddhi plant belongs to a different variety of the same species to which ganja belongs.

6. Ordinarily dense.

7. (a) and (c). Yes; in Rajshahi, Hill Tippera and the Tributary States of Orissa.

14. In the three districts mentioned in question 7? to a considerable extent.

18. Yes, all these drugs deteriorate by keeping; not quite, but to some considerable extent. Said to keep good for two years. Exposure to damp is the cause of deterioration which might be prevented by preservation of the drugs in air-tight rooms, unexposed to damp, and in tinned boxes.

19. No. Ganja, boiled with mustard or coconut oil, is used as an external application to sores and ulcers. It is a splendid cure for the itch. The oil is rubbed externally in cases of dropsy with good effect. Ganja is smoked for curing gonorrhoea and stomatitis, and also in spasmodic asthma. Extract or tincture *Cannabis indica* is internally administered in dismenorrhoea, insanity, dull headache, dyspepsia, loss of appetite. It is used as an aphrodisiac, and also a soporific agent. Used as a paste along with chilly, it removes swellings, cures bruises, and allays pain. Ganja smoke is used for inhalation in cases of foot and mouth disease in cattle. It is largely smoked by singers in the belief that it clears the throat and produces sweetness of tone and voice. Throughout Bengal Proper charas is used only for smoking.

20. Labouring classes—fishermen, palki-bearers, mendicants (sanyasis); not less than 33 per cent. of these throughout Bengal. I estimate that less than 1 per cent. of the gentry in Lower Bengal are addicted to ganja-smoking, and 0.5 per cent. to charas-smoking.

21. Round ganja is preferred to others in the Bangaon sub-division of the Jessore district; flat in Tippera.

22. Native charas.

23. Seldom. It is used by habitual ganja-smokers for smoking when ganja is not available. I have seen this smoked by the Maghs and low class Muhammadans of Tippera.

24. An infinitesimal proportion of old class pandits in East Bengal eat bhang. It is believed that this increases appetite, and cures chronic liability to dysentery and diarrhoea. It is eaten in very small quantities. Up-country men who reside in Lower Bengal and all employed as darwans or bearers drink bhang. My own view is that fully 80 per cent. of these are addicted to this habit. I cannot find out from the census papers what their total number is in Bengal Proper.

25. On the decrease. Liquor has replaced bhang, ganja, and charas, as far as the gentry is concerned. The increase in price of ganja has also diminished the number of smokers among the poorer classes.

26. I have seen only two habitual excessive consumers of charas in my life. Both these men died early of consumption. I know of twenty men who are moderate daily consumers of charas. I compute from my own knowledge and the evidence of the gentlemen examined—

(1) that 95 per cent. of ganja-smokers are of class (a), 2 per cent. of class (b), 0.05 per cent. of class (c), and the rest of class (d);

(2) that 50 per cent. of bhang consumers are of class (a), 25 per cent. of class (b), 20 per cent. of class (c), and 5 per cent. of class (d).

27. *Ganja*. (a) Fishermen, palki-bearers, coolies and sanyasis.

(b) Sanyasis (mendicants) and beggars.

(c) *Bhadralok* (high caste people of respectability).

(d) Fishermen and bairagies.

Class (a).—Fishermen have to pass the greater portion of their life in water and they want a stimulant. Ganja is the cheapest stimulant going. Coolies and palki-bearers seek a relief from fatigue in the ganja smoke. It gives them greater power of endurance. Sanyasis and bairagies take it to prevent catching cold from exposure, and also to secure greater power of endurance. Amongst the bairagies it is also largely used as an aphrodisiac, the morality of this class of people who are mostly found in pairs (man and woman) being exceedingly loose. Nearly every chowkidar in the district of Tippera is a ganja-smoker. They say they cannot keep watch at night without it.

28. As regards ganja—

(a) One to two annas weight.

(b) One-fourth tola to half a tola.

The cost varies in different districts.

29. (a) Dried tobacco leaves or prepared tobacco for ganja, in order to tone down the pungency of the smoke and the intoxicating power, and also to increase bulk so as to enable several men to enjoy the same preparation (chillum). Prepared tobacco is mixed with charas.

(b) Dhatura is so used. The object is to increase the power of intoxication in the ganja.

Yes; bhang massala is occasionally mixed with bhang and ganja. It consists of rose petals, aniseed, black pepper, sandal-wood powder, and sugar or molasses.

30. Charas and siddhi almost wholly in solitude; ganja in company. No; ganja is used amongst the bairagies by males and females alike, but in any other classes it is confined to males. It is not confined to any time of life. It is not usual for children to consume any of these drugs.

31. (a) Not easily formed.

(b) Yes, when once formed. This applies to all drugs.

(c) No.

32. The religious sect of Saivas must worship the god Siva with an offering of a prepared chillum of ganja. This sect comprises the bulk of sanyasis. At the conclusion of the Durga Pujas, the great national festival of Hindus, bhang is taken by all the members of the family. This is considered as essential by the orthodox class. The respectable classes drink bhang only nominally, females generally dipping a finger in the solution and touching it with their lips. This latter custom never creates the habit or is injurious. But the former custom amongst Saivas is said to create the habit of ganja-smoking.

33. There is hardly any public opinion against the use of siddhi in Lower Bengal. The number of people using charas is too small to attract public opinion against it. But a ganja-smoker is considered to be a disreputable individual. "Ganjali," or "ganja khor," is a term of reproach. He is generally disbelieved; so much so, indeed, that whenever an incredible or impossible assertion is made by anybody, the statement is regarded and called "ganjali," meaning that it is hardly worthy of consideration or belief. This disrepute of ganja is due to the fact that excessive smokers forget all idea of space and time, and indulge in an excess of the imagination which leads them to make incredible statements. Besides, as it is only the

lower classes that smoke ganja, a respectable member of society found to indulge in it is at once considered to have degraded himself to the level of the lower classes.

34. Yes, to the Saivas (sanyasis), bairagies, day-labourers (palki-bearers), and fishermen if they have to give up ganja-smoking. The reasons can be found in the answer to question 27. In the Bangaon sub-division of the Jessore district, there are no less than 3,000 men of this class.

35. (a) No.

(b) Possibly, but not to any great extent.

(c) By legislative enactment.

(d) The discontent in Bengal would not be serious.

(e) Certainly not in Lower Bengal.

(f) The lower classes would take to "tari" and the higher to liquor.

36. Yes, among the higher strata of society in Lower Bengal. This is due to the fact that the habit of ganja-smoking is considered as degrading and humiliating, while that of drinking is literally believed to be ennobling among the half-educated classes. Besides, there is a difference in the nature of the intoxication produced by ganja and liquor. Ganja never produces that exuberance of animality that is produced by liquor, and young, well-to-do people delight in this state of intoxication. People who have taken both ganja and liquor say that since the outstill system was established there has been very little difference in the amount of intoxication purchasable for one anna as between ganja liquor, and yet the intoxication of liquor is of a superior kind. The proof is that I have known personally some two dozen men who have given up ganja for country liquor.

37. Yes; smokers say that the intoxication of charas is "in the eye," of siddhi "in the memory and the imagination," of ganja "in the brain and the nerves." I understand that charas produces a mild form of intoxication, which does not completely permeate the system or break down the constitution in the same way as excessive ganja-smoking does.

38. In degree only, not in kind. Chur intoxicates most, round next, and flat next. It is said this difference in degree is due to the quantity of intoxicating material present in the three varieties, chur costing most and flat least.

40. Yes, *vide* reply to question 19.

41. (a) Yes, as regards all three drugs.

(b) Yes.

(c) Ganja alone has this property.

(d) Ganja-smoking has been known to nip an attack of cholera in the bud. I have heard an old planter say that where no other medicine was available the moderate smoking of ganja cured no less than 60 per cent. of the men attacked with cholera.

The moderate habitual use is referred to in case of (a) and (b); the moderate occasional use in (c) and (d).

43. Certainly.

44. (a). The immediate effect is an increase in the circulation of blood and exhilaration of spirits. (b) Yes, it is. (c) It does. (d) I do not believe that moderate use of any of these drugs allays hunger. On the contrary, it increases hunger. Excessive use deadens appetite. (e) Yes; each of these drugs creates appetite if

used moderately. (f) The effect lasts for an hour or two. (g) No after-effects. (h) No longing or uneasiness except in the excessive use.

The effect of ganja in producing exhilaration of spirits is instantaneous. That is why ganja is called "Turitananda" (instantaneous pleasure-giver).

45. (a) to (e) No.

(f) No. No instance known in which insanes who have no recorded ganja history have confessed to the use of the drug.

46. Yes, to the six questions of 45. The insanity is temporary. No case of permanent insanity due to ganja-smoking has come to my knowledge. The insanity is of the violent type; the man becomes a raving maniac. Yes, the symptoms are induced by use of the drug for some time after liberation. Can't tell if any of the symptoms can be called typical.

Yes; in my opinion the use of the drug by persons suffering from mental anxiety or brain disease to obtain relief has been sufficiently considered.

No; I don't think there is any evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs by a person who is deficient in self-control through weakened intellect.

I.—*Bidesi Khalifa, a bearer in my employ.*—

The man, according to his own statement, began smoking ganja while twenty-two years of age. Became an habitual excessive smoker in ten years. Consumed daily four annas worth of ganja. Became absent minded and dirty in habit at thirty-five. Used to vomit food from time to time. Said he had an indescribable sense of *malaise*. Was still strong and healthy. A raving maniac at thirty-eight. Was put under restraint. Got emaciated and haggard-looking after release. Wasting of the tissues began at forty. The left arm became attenuated and useless at forty-two. At this time would take only slice of bread and a cup of tea in the morning, and a very light meal at about 4 p. m. Could work without food for a whole day. Had no appetite of any kind. Would eat only a morsel—a hand-ful of rice and dal—once a day. Became awfully lazy, and would always suspect the fidelity of his wife for no reason whatever. Would frequent prostitutes' houses, although impotent. Was known as cracked. Another attack of insanity at forty-four. Was put under restraint for ten days only. Remained weak and skeleton-like, and talked more nonsense than sense. Began to have periodical attacks of dysentery. Died of dysentery in two days at forty-six years of age.

II.—*Sarat Chandra Ray Chowdry of Halisahar.*—

Very respectably connected. Began to indulge in ganja while yet a student in a Calcutta school. He was then about eighteen years of age. Excessive chastisement at home drove him into bad company, and he increased the dose to nearly two annas worth per diem. Became absent-minded and rather loud. As a boy, was quiet and unassuming. No insanity or ganja-smoking in the family. This at twenty-one years of age. Began loitering about in the streets. Would seldom go home for meals. Attacked some young women who fell in his way. His eyes about this time indicated madness. The fit passed off during the winter months and returned again in May next. Ran away from home when twenty-five years of age, and has not been heard of since.

III.—*Abhilas Chandra Banerji of Halisahar.*—

Began ganja-smoking at eighteen. Absented himself from home for days together at nineteen. Was known at twenty to be an inveterate ganja-smoker. Committed several indecent assaults upon women, and was frequently found in the houses of prostitutes. Would scarcely eat meals. Became emaciated and haggard. Left home and became a beggar. Died at Kalighat at twenty-five years of age.

N.B.—None of the above three men had any mental anxiety or brain disease. In cases II and III, the smoking originally began as a boyish freak. Several boys who began with them gave up the habit and are now respectable members of society.

IV.—*Dina Nath Rai, Halisahar.*—

Somewhat cracked from infancy. Was a sanyasi for years. Returned home at thirty-eight years of age. Had never before been mad. Fell in with a lot of bairagies. Before this used to indulge in siddhi-drinking and occasional ganja-smoking. Gave up siddhi under advice of the bairagies and took to ganja-smoking. Within two years became a raving maniac. Committed indecent assaults upon women. Just before getting mad the man lost all sense of morality. Was placed in irons for a fortnight. No ganja was allowed. Got better, and was released. Four days after had to be placed in irons again and sent to the lunatic asylum. Was there for six months. Came back hale and hearty. Remained well and without smoking ganja for six or seven months. Reverted to the habit again. In three months was again a raving maniac. Was a second time sent to the asylum. Came back cured. Resumed ganja-smoking shortly and got dysentery. The man lingered on as a skeleton for some years amongst the lower classes, and eventually died of dysentery when fifty-one or fifty-two years of age.

It was remarkable how this man could remain without food for days together.

47. No.

48. No. It may, however, be said that people debilitated by prolonged excessive use who have not altogether lost the progenerative power do beget weakly children. This, however, is rare. I remember only one such case. As a rule, habitual excessive use of ganja—I do not allude to charas or siddhi at all in this question—destroys power to beget before undermining the man's physical strength.

49. (a) Yes.

(b) Yes, if Vaishnavis are so designated.

(c) Can't say if use for this purpose is more injurious or not, but one would expect it to be so, seeing from analogy that whatever causes unnatural or abnormal excitement strikes at the very root of the energy that supplies natural power.

(d) No; no impotence.

50. Yes; it does produce impotence of unmistakable character. The other replies are the same as in 49.

51 and 52. (a) Certainly and decidedly not.

(b) No connection whatsoever in Lower Bengal.

53. No, unless the man has become insane by excessive use. I know of fourteen cases in which persons insane from excessive use of ganja committed unpremeditated violent attacks on women passing by. I know of no other crime. I know of no case of temporary homicidal frenzy.

54. No.

55. (a) No; no authentic information on this point is available.

(b) Yes, my own opinion is that this can be done. I remember to have seen such stupefaction from unadulterated but well-prepared ganja in the case of three fakirs at Hughli. One man prepared the ganja in my presence. He smoked it, and then passed it on to his fellow travellers. These latter, although warned by the preparer of the thoroughly crushed and beaten and therefore intoxicating condition of the ganja, smoked it and remained stupefied—completely insensible—for over an hour. I may note that my opinion is in conflict with that of all the witnesses examined by me.

56. I have no information to give under this head other than what is already recorded in answer to question 29.

58. Not working well; capable of much improvement.

59. The excise laws are much too stringent, and provide for punishment in cases of barely technical offences. As an extreme case, I may mention the fact that in one case a brother of a licensee was fined Rs30 merely because he brought down a jug of date juice on account of the licensee during the latter's illness. The man had no pass, nor was his name entered in his brother's pass. Cruel, indiscriminate prosecutions for possession of pachwai and tari are not uncommon. The law should be amended in this direction. The Excise Department should be manned by educated men, and the lowest official entrusted with the power of arresting men should carry a salary of no less than Rs50. A permanent staff of Deputy Collectors should be placed under the department, their jurisdiction being changed at intervals of three years. Convictions of whatever kind in excise cases should be appealable. The Collector of the District, who is an official superior to the Subordinate Magistrates who try excise cases, should have no connection whatsoever with excise administration. A Deputy Collector, be he designated as Excise Deputy Collector or otherwise, should have complete control, subject to the supervision of the excise inspectors and the Excise Commissioner. Similarly sub-divisional officers should be relieved of excise work.

62. I do not understand this question to apply to Bengal. As far as I am aware, I think the cultivation of the hemp-plant for the production of bhang is already sufficiently controlled in Bengal. Practically no one can cultivate such a plant for such a purpose, except surreptitiously or with the connivance of excise subordinates. Any one found to enclose or fence in a single "siddhi gach," the wild variety, is prosecuted or punished under the existing laws.

63. I have, as to ganja. Of the districts of which I have knowledge, the wholesale vendor, otherwise called the goladar, is, for all practical purposes, the licensee of all the retail shops. There are nominally different licensees, but they are all either servants or creatures of the goladar. The mischievousness of this arrangement is self-evident. The goladar rules the trade. He cheapens or enhances the price at his pleasure. The sale at cheap prices in the retail shops increases consumption. The accounts of no shop can be trusted, and the statistics collected are far—very far indeed—wide of the mark. My idea is that monopoly in this trade should be disallowed. There should be at least half a dozen golas owned by as many men in reality unconnected with each

other. Each gola should have its capacity fixed and each individual shop likewise. In sub-divisions the same arrangement, on a minor sale, should be effected. The stringent conditions of the license are, I know, nowhere followed, and the Board of Revenue have seen fit to relax rules in regard to poor natives for breach of such conditions. Some of these rules should be entirely left out. Each gola should be taxed. The Excise Deputy Collector should have under certain limitations, power to disallow the renewal of the lease of a gola. These things done, it might be said that trade in ganja is sufficiently controlled by authorities.

65. (a) Yes.

(b) *Vide* reply to question 36.

66. Yes; in proportion to their relative intoxicating value. There is no other safe test.

68. I have no knowledge of shops licensed to sell ganja or its preparation or any of the other drugs for consumption on the premises. But as a matter of fact, shops holding the license to retail ganja are used for smoking purposes.

69. Yes, in that vague, undefinable way in which the agency of the police is capable of being employed for such a purpose. The thana office is asked to consult the wishes of the people. A notice is posted up in the thana, perhaps a drum is beat, and possibly the friends of the thana officer are in a few cases consulted. Practically there is no consultation. Genuine local public opinion, such as is to be found in the villages, is considered, even by police subordinates, to be beneath notice.

70. Actual occurrences of smuggling are very rare. "Smuggling" of evidence to prove smuggling is, according to my experience, much more common. A cry of smuggling once raised is hard to quell. It affords excise subordinates opportunities of securing many convictions on weak, insufficient, and even worthless evidence. It also enables plausible explanations being offered to superiors, and accounts for a great many days of touring, where no touring is actually made. Duty is paid, and there is certainly no general use of untaxed drugs either in the districts bordering Hill Tippera or the Orissa Tributary States.

Oral evidence.

Question 1.—I entered the service in 1881. I have been Sub-divisional Magistrate for nine months; I have been Registration Officer, eleven months; Settlement Officer, five years; Professor of Science, three years; and Excise Deputy Collector for a short period. Bangaon is in the Jessore district.

Question 46.—Bidesi Khalifa was a bearer and also waited at table. He used to get R16 pay at first; but I reduced his pay on account of his habits, and when he died he was getting R10. His age was about forty-four when he died. He was a servant of the family for many years, but only under my personal observation from 1886 to 1893 when he died. He was also under my observation in 1881 and 1882. In 1881 I know he used to smoke ganja habitually in moderate quantities. I noticed the first symptoms of madness in 1887 or 1888. He was very mad for a few weeks and he had to give up ganja-smoking. He was kept under restraint and not allowed to take ganja. When liberated from restraint he took ganja again, and became mad in 1888, 1889, or 1890.

This time he remained mad for a fortnight. He was boisterous for a fortnight and idiotic for some six weeks more. He became mad a third time in 1891, and never recovered completely till his death in 1893. In this last period he used to neglect his food. He used to do light work as a servant. He would serve chota hajari and absent himself for the rest of the day. Still I kept him on and paid his wages, Rs.10. I used to pay his wages to his wife. He was always honest. He was not loose in his habits. He might have drunk liquor in his younger days. I think his caste was Jairwara, and he had been servant in a refreshment room at Jabalpur. His father was not in my service and I did not know him. I picked him up in Calcutta, and I know nothing about his antecedents, except that I was told and believed that he had been in service at Jabalpur. I believe he belonged to the Central Provinces. I remember the occasion on which I first discovered him smoking ganja. I was thrown from my horse near the stable, and the servants' quarters were next door to the stable and I smelt the smoking of ganja.

Sarat Chandra Ray Chowdhri was a student when I knew him and he used to live near me. He was under the instruction of a tutor who also taught in my house. He learnt the habit, I suppose, from Calcutta students. He did not pass any examinations though he read for the matriculation. He lived with his father. He used to mix with the vulgar boys in a basti behind the Hare School. His father used often to wig him. He began smoking tobacco and then took to ganja. I have found him with a chillum loaded with ganja. His father used to bring him to me to be chastised. He ran away from home because of his uncle's ill-treatment. I attribute the case to ganja, because the boy, when young, was a good boy, and I knew he took ganja. He did not drink. His companions did not drink, for though they were of low caste they were poor. I never heard of his being immoral, and we should have heard of it if he had been. He would remain all right in the winter months and get bad again about March and remain bad through the rains. He was quite beyond control and did as he pleased. I think he smoked ganja to the same extent all the year through. My experience is that most people who go mad from ganja become boisterous in the hot weather. This was true also in the case of Dinanath Rai Chowdhry, case No. 4. The boy became absent-minded while studying. I noticed him becoming mad first about the end of February 1879. He was then eighteen. I think his absent-mindedness was noticed six or seven months after he was detected taking ganja. It would not be right to describe him as a boy of naturally feeble intellect. On the contrary he was bright. He certainly went thoroughly to the bad. But he was not immoral. It is true he interfered with young women, but he did not frequent houses of ill fame.

Abhilas Chandra Banerji probably suffered both from ganja and immorality. He was not boisterous. He was enfeebled to the extent that he was generally called mad. There was no insanity in the mother, but I cannot answer for the father. I have heard people say Abhilas drank, but I knew nothing personally about it. I did see him smoking ganja. I first saw him smoking ganja in his own house. It is not usual to smoke before one's neighbours or betters. I do not say that he hid the liquor, but if he had been an habitual drunkard I should have seen it.

His mother was distantly connected with our family, and so I learned all about him. He once travelled as a mendicant from Calcutta to Cuttack. I gave him money to return to Calcutta, but instead of returning he smoked ganja and was found nearly dead in the streets.

He had not drunk liquor then. I took him home and he was examined by a Hospital Assistant, who said that he was at the point of death from the use of ganja. The Hospital Assistant gave this opinion in answer to our questions.

62. *Evidence of BABU KANTI BHUSHAN SEN, Baidya, Special Excise Deputy Collector of Cuttack.*

1. I was placed in charge of the Excise Department, Cuttack, on the 26th September 1891, and have since made a series of enquiries relating to ganja which grows in the Gurjats or Tributary States of Orissa and is commonly known as Gurjat ganja.

2. The definition of siddhi, bhang, subji or patti, as given by Dr. Prain, is correct. The term commonly used in the Cuttack district for it is patti. There is no charas shop in the district, and charas is not known to be used here. I have no special knowledge about it.

The definitions of the different varieties of ganja as given by Dr. Prain, apply to the ganja produced in Rajshahi. The Rajshahi ganja is used here, and the varieties are known here under the same names. It has been stated by Dr. Prain that "the formation of seeds is prevented by the destruction of all male plants." A very large quantity of seeds is found in the bales of ganja, imported from Rajshahi, so the formation of seeds does not appear to be successfully prevented. A very curious fact has been noticed peculiar to these seeds found in the Rajshahi ganja. I have been assured by those who raised plants from these seeds in the Cuttack district that they uniformly found them to produce male plants, and if they at all produced female plants they were abortive in their flowers, so that only patti and no ganja could be obtained from them.

3. Hemp plants grow in some parts of Bengal spontaneously, from which siddhi or patti is obtained. I have seen them in the districts of Jessore and Faridpur. In the Tributary States of Orissa they, specially the female or ganja-producing plants, grow more spontaneously than in Bengal. I have found them abundant in the Tributary State of Khandpara.

4. In Bengal they are known by the name of siddhi or bhang plants, and in Orissa as ganja (female) and patti (male) plants. The siddhi plant of Bengal and the patti plant of Orissa appear to be identical.

5. The wild plant of Orissa generally grows towards the close of the rains, and thrives well in a mild climate and loamy soil. Sandy and very moist soils are unsuited for its growth. Usual rains at intervals promote its growth. As regards elevation above sea-level, I have seen it grow on hill-tops as well as in the plains. So long as the soil is moderately dry and loamy, and the climate not very hot, the elevation above sea-level does not appear to affect its growth.

6. Generally scattered.

7. Ganja is cultivated in very large quantities in the Rajshahi district. But, as I have no personal knowledge of its cultivation in that district, I shall confine my further replies to Gurjat ganja and patti referred to above.

(a) Yes; in the Tributary States of Orissa.

(b) No.

(c) Yes; in the Tributary States of Orissa.

(d) No.

As my enquiries relating to Gurjat ganja were confined to about three miles of the frontier in the Gurjats, I cannot say to what extent it is produced. But the quantity is sufficient to meet the local demand as well as the demand of the consumers in the British territory who live along the frontier. Besides this, a few maunds are imported into the district of Puri and elsewhere.

8. I think there has been some increase in the area under such cultivation in the Gurjats. In Government of Bengal Order No. 165-T., dated the 19th October 1878, the cultivation of Gurjat ganja in the Tributary States within three miles of the frontier was prohibited. But subsequently this prohibition was withdrawn in Government of Bengal Order No. E. L-G. 4, dated the 6th September 1889; since which the cultivation in the Tributary States appears to have been on the increase, as is known by the falling off in the consumption of Rajshahi ganja from 141 maunds 7 seers 12 chittacks in 1889-90 to 112 maunds 21 seers 9 chittacks in 1892-93. The last year's incidence on account of duty and license fees per seer of Rajshahi ganja is about Rs. 15, while in the Tributary States no such license fee or duty is realized, and ganja is usually sold from Rs. 2-8 to Rs. 4-8 a seer. A portion of the falling-off is, no doubt, due to the high incidence of Rajshahi ganja. As there is no licit consumption of Gurjat ganja in the Cuttack district, a great quantity is being smuggled into the British territory along the frontier. Twenty-three cases of such smuggling have been detected during the half-year ending 30th September 1893.

9. The plants (Gurjat ganja and patti) grow spontaneously from the preceding year's seeds, and are also cultivated within the enclosed premises of the people of the Gurjats. The plants grow towards the close of the rainy season, and take about six months before the flowers are sufficiently matured. The plants are then felled, and left to dry for three to five days, after which the twigs containing the flowers are collected and tied into bundles. This is Gurjat ganja. The leaves of these plants (female) as well as those of the male plants are also collected and used as patti.

10. In the Gurjats, i.e., the Tributary States of Orissa, almost all the consumers grow ganja-plants, and as men belonging to the different castes from the Brahmin to the Pan (a very low aboriginal class) are found amongst the consumers, the cultivation is not restricted to any special class.

11. Yes, in the Gurjats.

12. Yes, in the Gurjats I have found them in the Tributary States of Keonjhar, Dhenkanal, Atgarh, Tigriah, Baramba, and Khandpara. As to the extent, *vide* latter portion of my reply to question No. 7. In the Gurjats the male plants are not extirpated.

13. I have no personal knowledge about the cultivation of ganja in the Rajshahi district. As regards Gurjat ganja, I beg to refer to my replies to questions Nos. 5 to 12. I think the cultivation of ganja in tracts of country along the sea side in Orissa, where the soil is very sandy, will not be successful, unless the soil is specially prepared for its cultivation.

14. (a) Yes.

(b) No.

(c) Yes. In the Tributary States of Orissa.

As regards extent, *vide* my reply to question No. 7.

15. The particulars about the preparation have been given in my reply to question No. 9. The cultivated and the wild plants are treated similarly.

(A) Gurjat ganja is smoked as well as drunk as patti. In one particular instance I have seen Gurjat patti smoked. The man, ■ fakir, resorted to it on account of high price of Rajshahi ganja. The drug is mixed up and well compounded with a little of tobacco leaves and smoked.

(B) Majum, a sort of confectionery, is prepared with sugar from the decoction of ganja (both Rajshahi and Gurjat) or patti and is eaten. I have seen a man to chew ganja and to swallow it.

(C) Patti as well as Gurjat ganja is drunk with the addition of certain spices and sugar. For particulars of the spices used—*vide* reply to question No. 29. Well-to-do persons sometimes adopt ■ different plan. They boil the leaves with cow's milk and sometimes with cocoanut water. The milk or water is thrown off; but the leaves are strained and dried and stored up for use with spices and sugar. Some, when going out on a journey, prepare large pills, with patti and spices, which they swallow with or without water.

16. (a) Yes.

(b) Yes.

(c) I do not know anything about the preparation of charas. Ganja is prepared from the wild plants in the Gurjats.

17. It is not restricted to any particular class—*vide* reply to question No. 10.

18. Ganja and bhang deteriorate by keeping: both of them lose the greater part of their effect of time. I am not sure whether they entirely lose their effect. They keep good for about two years, though they deteriorate gradually. The causes of deterioration are—(1), production of insects in the drugs, (2) dampness on account of ill ventilation of the warehouses, and (3) loss of resinous matter in the ganja on account of damp and air. A thicker covering of the bales in which ganja is imported and better ventilating arrangements of the warehouses will stand in the way of deterioration. The full prevention of deterioration cannot, I am afraid, be effected, except by scientific measures, which will be prohibitive on account of their high costs. Tin cases like those used for storing tea are likely to prevent much deterioration.

NOTE.—I have no personal knowledge about charas. My answers, therefore, will be confined only to ganja and bhang.

19. Ganja is used in this district for smoking as well as for eating in the form of majum—*vide* reply to question No. 14; while in my native place in the district of Jessore, I found a person chew and eat nearly a tola of Rajshahi ganja, for which he did not appear to be worse. Gurjat ganja is also drunk as siddhi or patti, especially by the pandas (priests) of Jagannath at Puri.

20. The smoking of ganja is not restricted to any particular class. As a rule, the lower classes smoke more ganja than the higher all over the Cuttack district and the Gurjats. The classes of fishermen and boatmen are mostly ganja-smokers. Roughly speaking, percentage of ganja-smokers in the district of Cuttack is one as deduced from the annual consumption of licit and illicit ganja to the extent of 120 maunds by a population of about nineteen lakhs, the average quantity consumed by each person being taken to be 24 tolas per year.

21. Round ganja is preferred for smoking. Very little quantities of flat and chur ganja are imported into the Cuttack district. The cause of preference to round ganja is probably the fact that it retains resinous matter longer than the flat and chur ganja.

22. Charas is not known to be used in the Cuttack district.

23. I have known only one man, ■ Muham-madan fakir, to smoke bhang or patti. He said that he preferred ganja, which he could not always afford to smoke on account of its high price.

24. Bhang or patti is generally drunk by ■ few of the Marwaris and Bengalis who have settled at Cuttack, and by Brahmins and certain other higher classes of Uriyas. Its use is ordinarily restricted to the towns of Cuttack, Jajpur, and Kendrapara. The proportion cannot be given.

25. The use of ganja and bhang is on the decrease in the Cuttack district, as is known by the fall of the consumption on account of high price. The gradual falling-off is proved from the following figures:—

Year.	Quantity of ganja consumed.		
	Mds.	Srs.	Chs.
1886-87	174	4	11
1887-88	164	13	4
1888-89	152	7	0
1889-90	141	7	12
1890-91	136	22	7
1891-92	112	10	3
1892-93	112	21	9

As regards siddhi, licenses began to be regularly issued from 1890-91, in which year the consumption was 3 maunds 13 seers and 8 chittacks. In 1891-92 the consumption was 9 maunds 2 seers and 3 chittacks; from this it fell to 5 maunds 5 seers and 12 chittacks in the last year. A part of the falling-off is due to smuggling of Gurjat ganja and patti.

26. The proportion cannot be given. Excessive consumers of ganja are generally either fakirs or madmen.

27. *Vide* reply to the last question.

28. Ganja—(a) About one-eighth of a tola, costing two pice.

(b) About one tola, costing 4 annas.

Patti.—(a) About one-eighth of a tola, costing half a pice.

(b) About one tola, costing one anna.

29. Ganja.—

(a) Tobacco leaves.

(b) I have been informed that seeds of dhatura and sometimes of kuchila (nux vomica) too are mixed with ganja to make its effects more lasting and strong. One consumer informed me that when he and others could not afford to purchase ganja

on account of its high price, they would smoke, without it, with ganja or the kernel of the seeds and the root of the plant known in Bengal by the name of kalika and in Orissa as kaniar (*Thevetia neriifolia*), which is known to be a poisonous plant.

Patti or bhang.—

(a) Ordinarily, patti is mixed with black pepper and drunk with water,

and sometimes with the addition of a little sugar. These admixtures are made to give a relish to the taste.

(b) Exceptionally, spices generally known by the term of bhang or patti massala, the particulars of which are given below, are used. I sent for half-an-anna worth of patti massala from the bazar, and found it to contain the following ingredients:—

Vernacular name.	English name.	Latin name.	Properties.
Elachi (small)	Cardamoms	Elettaria Cardamomum	Slightly astringent, aromatic, and carminative aromatic (expelling flatulence and relieving painful cramps, spasms, hiccup, and other forms of distress in the stomach and intestines).
Elachi (large)	Do.	Amomum Cardamomum	
Golmarich	Black pepper	Piper nigrum	Stomachic causing flow of saliva, mucus, and gastric juice, aromatic, slightly astringent, and is believed to possess antiperiodic and antipyretic properties.
Labanga	Cloves	Flower of Caryophyllus aromaticus.	Stimulant, stomachic, antispasmodic, and carminative.
Jaitri	Mace	Perisperm of the nut of Myristica moschata.	Stimulant, antispasmodic, and aromatic.
Mahuri	Anise (common native fennel).	Fruits of Anethum panmori	Stimulant, stomachic, carminative, antispasmodic and produces stimulant action on the bronchia mucus membrane.
Darchini	Cinnamon	Bark of Cinnamon zeylanicum	Stimulant, carminative, antispasmodic, stomachic, and astringent.
Nageswar	Nagkeshur	Flower of Mesua ferrea	Used in medicine as well as esteemed for fragrance.
Jira	Jira	Fruit of Cuminum cyminum	An ordinary condiment in the kitchen.
Posta	Posta or opium-poppy seeds.	Seeds of Papaver somniferum (album).	Anodyne.

The object of the admixtures is to neutralize the bad smell of the patti and reduce its ill effects. I have known also cucumber seeds to be mixed, which is evidently done to produce soothing effects. Marwari and up-country men generally do it and term it *thandai*.

I have stated in reply to question No. 15 that Gurjat ganja is also drunk with spices as above.

30. Both ganja and patti are consumed in company. When no company is obtained, they are consumed in solitude. Mainly, persons of the male sex are consumers of both ganja and patti. Generally, persons advanced in years consume them; but the lower classes, *e.g.*, fishermen, begin the practice from their youth. Children never consume these unless prescribed as medicine.

31. The habit of consuming ganja and patti is easily formed and is difficult to break off. In the case of patti, the tendency for the moderate habit does not develop into the excessive. In the case of ganja, this tendency has not been, however, particularly marked.

32. During the annual Durga Puja ceremony, siddhi or patti is almost universally drunk in Bengal on the evening of the last day of the puja. The people indulge in this drink after they return from drowning the idols in water. This is a custom which has probably arisen to give a sort of relief after the toil and hard work of the people during the three days of the puja ceremony. In some families, siddhi is offered to the goddess as a part of religious observance in accordance with

an injunction of the Shastras. This custom appears to have been followed from time immemorial, and has thus gradually been regarded as essential by most people. It is, however, temperate, and does not certainly conduce to the formation of a habit. This custom prevails in Bengal, the seat of the Durga Puja.

Many Bengalis have been settlers in Orissa since some generations past and have introduced this custom here in connection with the Durga Puja. But a similar custom of offering siddhi as a part of religious observance is prevalent here. It is offered to the god Ganesa, who is worshipped in the month of Bhadra (August and September) and the votaries partake of it exactly like the Bengali worshippers of the goddess Durga. A sort of sweetmeat is made of siddhi with sugar—or its substitute, molasses—and with wheat flour, and formed into round balls of *laddu* with ghee. The quantity of siddhi in each of these *laddus* is scarcely sufficient to produce intoxication. Ganja is not in any way thus indulged in as a part of any religious or social ceremony either in Bengal or Orissa. There was, however, a practice of smoking ganja after the worship of a god called Trinath (a form of Mahadeva in some parts of Bengal (Jessore). The worship was locally known by the name of Trinath's *mêla*. Though the term "*mêla*" appears, the actual affair is unlike anything of a *mêla* or fair. Three things were purchased, each worth a pice, *viz.* (1) 1 pice worth of oil used for burning a lamp, by the light of which a text describing the powers of the god was read;

(2) 1 pice worth of betel-nuts and pan for the use of the people assembled; and (3) 1 pice worth of ganja, which was divided into three parts and smoked in three chillums after the text had been read out. The so-called *mêla* was introduced for the first time some fifteen to twenty years ago, and is said to be dying out gradually.

I learn a similar *mêla* has been recently introduced in parts of Orissa (Jajpur and Bhadrak), where ganja is smoked as a part of the semi-religious observance.

33. The consumption of siddhi or patti is not generally regarded as a pernicious habit, and is in no way regarded as degrading. There is thus no public opinion (social or religious) against it. This is probably due to (1) the sanction of religious Shastras; and (2) the rather comparative harmlessness of the drug. The same remarks do not apply to the smoking of ganja. There is a decided public opinion against its use among the educated classes, and the ganja-smoker is looked down upon in society. This opinion is based upon (1) the fact of its being primarily an intoxicant of the lower classes who, when willing, can ill afford to pay for wines, etc., and are thus obliged to be confined to this cheap drug; and (2) the fact of its suspicious demoralizing effect. The fakirs, as a rule, smoke ganja, and this habit of theirs is not, however, regarded as in any way degrading or otherwise injurious by even the educated classes. The lower classes have no opinion either in favor of or against its use.

The hemp plant is never worshipped either in Bengal or in Orissa on any occasion by any sect of the people.

34. It will positively be a serious privation to the habitual consumers of both ganja and patti. The habit cannot easily be broken off, and uneasiness is necessarily felt by consumers who have acquired the habit. That it is so, is proved by the fact that many persons deprived of ganja are said to have resorted to the smoking of the more deleterious dhatura, kuchila and kalika seeds in lieu of ganja. Those who have acquired the habit of daily drinking potions of patti fall victims to some diseases endangering their life when they are deprived of it. I cannot give any idea of the probable number of such people.

35. Considering all sides of the question, I do not think it would be feasible to prohibit the use of either ganja or patti. Even if the prohibition were enforced by rigorous law, it would be impracticable to prevent smuggling of the same from the Native States. If, however, any attempt be made to prohibit the cultivation of the hemp plant in these Native States, the people will surely resent this interference on the part of the British Government, and thus might lead to a political danger. Moreover, as the drugs appear to have obtained something like a religious sanction, the total prohibition will probably cause an irritation in the mind of the masses, which might lead to unpleasant results. Another potent factor standing against any effective prohibition lies in the fact of the easiness with which the plant can be safely grown in any bit of land within the secluded enclosure of the zenanas. The cost of strict supervision and detection in these cases, if adopted, would be enormous and almost prohibitive. The consumers would also, no doubt, be seriously discontented, when their only luxury of an intoxicant which they indulge in amidst their poverty is removed from their reach.

As regards Orissa, alcoholic stimulants are never drunk by any genuine Uriyas of high caste. The

alcoholic liquor is mainly confined here to the low class Muhammadans and the lowest classes of Hindus (Hinduized aboriginal classes), such as Pans, Kandrās, etc. The Uriyas being mostly Voishnabas, strictly follow religious injunctions in this respect, and are thus debarred from an indulgence in liquors. Hence it may safely be inferred that the prohibition of ganja and patti will not likely be followed by recourse to alcoholic stimulants. But I think the habitual consumers (when thus circumstanced) will be driven readily to resort to other drugs, which are plentifully indigenous in this province. Even the comparative high price of ganja is reported to have led many habitual consumers to the use of some of these more deleterious drugs (dhatura, kuchila, kaniar, etc.).

36. In Orissa—no.

NOTE.—I have no experience of the use of charas. All my answers, therefore, deal only with ganja and siddhi or patti.

37. I do not know—*vide* note.

38. Round ganja (Rajshahi) is preferred by the consumers, as it is said to be the strongest of the three preparations. On account of the round form into which ganja is rolled, it retains the resinous matter longer than either the flat ganja or the chur. There appears to be no appreciable difference as to the kind of effect produced by them.

39. I cannot say.

40. I do not know whether the smoking of ganja is ever prescribed as a medicine by the native doctors. As regards siddhi, it is generally used among the people in various bowel complaints. Bhāba Prakāś, a Hindu medical treatise, adopted by eminent native doctors, embodies the results of the Tantras (scientific treatises) and of the Charaka, Sustruta, and Bhagbata. It describes the effects of siddhi in following terms:—

(Sanskrit sloka, romanized):—

“Bhangā kafaharī tiktā grāhinī pāchanī la-
ghuh.

“Tikeshnoshnā pittalā mohamada-bāgbanhi
bardhini.”

The sloka may be thus rendered:—

Bhanga or siddhi is expectorant, bitter astringent, digestive, refreshing, stimulant, bile-forming, intoxicant, produces loquaciousness of inebriates, and appetizing.

I do not know whether any of the preparations is used in the treatment of cattle disease.

41. Ganja and bhang are beneficial—

- (a) As digestive.
- (b) Are believed to give staying-power under exertion and exposure and to alleviate fatigue.
- (c) As regards ganja, I cannot say. As regards patti, its moderate habitual use is considered a febrifuge and anti-malarious.
- (d) In advanced years of life, patti in moderate doses is calculated to promote good digestion and keep health.

Generally speaking, the higher classes prefer patti and the lower classes ganja. The proportion cannot be given. Moderate habitual use is referred to in replies (b), (c), and (d), and moderate occasional use in reply to (a).

42. The moderate use of both ganja and patti is harmless. The consumers appear to be as useful members of society as those not addicted to them.

43. Yes.

44. The effect of smoking ganja on the habitual consumers is instantaneous. It is refreshing, produces slight intoxication, does not allay hunger, creates appetite, and the effect lasts from two to three hours; after-effects not noticeable. Those habitual consumers who have stated periods for gratification, feel longing and uneasiness, if they do not satisfy it at those periods. When taken in excess, ganja-smoking seems to allay hunger, as is seen in fakirs.

As regards patti, the effects on the habitual consumers are the same as those of ganja-smoking, excepting that intoxication begins not instantaneously, but after the lapse of about an hour or so. The intoxication is milder in nature, but lasts longer than that produced by ganja.

45. *Ganja*.—The habitual moderate use impairs health of those that are ill-fed.

It improves digestion and causes appetite when first begun, but it gradually injures digestion when the habit is persevered in for some years. It causes dysentery in men who have grown old and have all along smoked ganja. Old ganja-smokers that I have known to die, have died of dysentery. But in these cases their span of life was not short. Ganja-smokers are seen to cough several times after they have taken the usual whiffs, and are thus likely to get the respiratory organs irritated to a certain extent.

It impairs the moral sense and induces habits of immorality in beginners. It produces insanity in persons of weak brains, and those that have a hereditary predisposition to it. This disease may be temporary or permanent according to circumstances. I believe the causes of insanity generally traced to ganja are aggravated by the excessive use of it with the admixture of more powerful narcotics like dhatura and kuchila. Cases of temporary insanity, due exclusively to the use of ganja, are not known to me. I know a man who was formerly a moharrir in the civil court having become insane (I am told) by taking to the use of ganja. I talked with him for some hours, and found out that he had had a mental grief, due to some private domestic causes, before he began to indulge in ganja. He began to smoke excessively in order to drown his feelings, and has now become a harmless lunatic, probably for life. In this connection I beg to add that I visited the Cuttack Lunatic Asylum and found 18 lunatics. They have been classed in the register according to the causes as follows :—

Cause of insanity, alleged to be ganja	3
Cause, hereditary tendency	1
Epilepsy	2
Grief	1
Cause unknown	11
TOTAL	18

I examined the three cases which were said to have been due to ganja-smoking. One of them was unapproachable, as he was in the habit of throwing faecal matter at the enquirers. The remaining two denied *in toto* their previous use of ganja. They were asked whether they liked to smoke ganja, but they declined the offer and wanted sweetmeats. I examined their physiognomy carefully, and could not find out any difference between theirs and those of the other lunatics. It appears, however, from the records of their past history that they led the life of ascetics, more or less. Their ascetic tendency has perhaps led to the belief of their ganja-smoking. At all

events, I was not satisfied as to the causes of lunacy of these men having been primarily ganja.

Note.—From what I have seen of the effects of ganja-smoking on different persons, I am of opinion that all the effects described above vary according to particular constitutions. Generally speaking, persons of nervous temperament are more liable to the ill-effects of this drug than others. Of course those that are ill-fed and ill-nourished suffer greatly from every sort of self-indulgence. Therefore all my above replies must not be taken as applicable to all cases.

Patti.—I have already described patti as comparatively harmless, and none of the effects described above, are traceable to its use in moderate quantities.

46. The effects of habitual excessive use of the hemp drugs have not come under my particular observation. I have, however, seen many Hindu sanyasis and Muhammadan fakirs who indulge in both ganja and patti in rather large doses. They seemed to be no way worse off by the use; rather I am told these drugs produce forgetfulness of worldly affairs and lead to concentration of thought, which is the first object of their asceticism. Their constitution, as a rule, is hardy. How far, however, the latter effect is produced by their practice of the various Yoga systems, I cannot say.

47. The habitual moderate use of the hemp drugs does not appear to be a hereditary habit. But the example of the ganja-smoker often leads the children to adopt the habit of the father. As regards patti, it does not appear to affect the children so much.

48. *Vide* reply to 47.

49. Ganja-smoking is said to increase sexual appetite in the beginners of the habit, and is sometimes indulged in as an aphrodisiac. It is, however, not so used by prostitutes who generally do not smoke ganja, except to please their customers. Its use as an aphrodisiac is more injurious than its use as an ordinary narcotic, inasmuch as it leads to excessive sexual indulgence, and thus indirectly affects the system. The excessive use of ganja tends to produce impotence.

The above replies do not apply to the use of patti. In exceptional cases patti may be used as an aphrodisiac, with the consequent results.

50. *Vide* reply to 49.

51. The proportion of bad characters who indulge in ganja or siddhi is not large. There is no marked connection between their moderate use and any crime, either general or special.

52. As the excessive use of all intoxicants deadens the moral sense and produces for the time being a loss of consciousness of dangers apprehended, ganja and siddhi, when taken in excess, probably act in the same way like the other intoxicants.

53. I do not know.

54. I have no positive knowledge.

55. Now and then cases are reported in newspapers about the criminals inducing their victims to partake of siddhi to stupefy them. I do not know whether complete stupefaction can be thus induced by siddhi alone. It is suspected that more potent narcotic drugs are mixed with siddhi when so used. Siddhi, however, produces a state of helplessness, and this state may at times be taken advantage of by evil-minded persons.

56. *Patti*.—The admixture of sugar hastens the effect of patti, while the other ingredients (generally known as bhang massalas) seem to improve the taste and to moderate the ill-effects.

Ganja.—In cases of moderation any admixture, except dry tobacco leaves, is seldom made. In cases of excess, however, dhatura, kuchila, and other drugs that are themselves as narcotic as ganja, or more so, make the effects of ganja more deleterious and lasting. I personally know a case where a man having a grudge against one of his companions in society induced the latter to smoke ganja in which dhatura was mixed. This man had never smoked ganja before. He got a fit of insanity which lasted about a fortnight. Afterwards he was placed under native medical treatment, and recovered completely to be able to resume his own former duties.

57. In Puri, Gurjat ganja is drunk like patti, with the addition of milk, sugar, and bhang massalas. The Pandas of Jagannath are especially the consumers of ganja in this way. I have not heard good reports regarding their moral character. Physically they do not seem to be worse off by the use of this beverage. They are, however, well-to-do, take nourishing food, and live comfortably.

58. The present system is working fairly. Smuggling of Gurjat ganja should, in my opinion, be checked as much as possible.

59. This can be done by reviving the Government of Bengal's order, prohibiting the cultivation of ganja in the Tributary States within three miles of the frontier of British territory, and by appointing a strong detective establishment to guard against this smuggling (*vide* my reply to question 8). Next the importation of Gurjat ganja has been legalised, and the minimum quantity to be imported at a time has been fixed at 8 maunds. The importers do not easily get sufficient ganja to fulfil the requirements, and are thus unable to import the Gurjat ganja into the Cuttack district. If the minimum be reduced to 1 maund, the importation will be easier, and as this ganja may be cheaper, the consumers along the frontier accustomed to this will have little incentive to the practice of smuggling.

60. Ganja is not cultivated in Orissa under Government control.

62. No.

63. Retail vend of any of the preparations of hemp to persons under a certain age should, in my opinion, be prohibited, as self-indulgence in any intoxicant in whatsoever shape by youths is undesirable. A condition may be inserted in the license issued to the retail vendors to that effect, and vendors may be punished for infringements of the same, as provided in the excise law.

64. Rajshahi ganja is imported into the Cuttack district. The importation of the drug should be carried on under stricter rules. The bales are often found to have been tampered with during transit, and more or less quantities of ganja are found to have been stolen. The gunny bags should be thicker than they are now—*vide* reply to question 18.

65. Yes.

(a) The taxation, with reference to ganja and patti, is reasonable.

(b) To opium, reasonable.

The taxation, with reference to alcoholic liquors, may be considered from two different points of view, *viz.* (1) that of their relative intoxicating

properties; and (2) that of the strength of the purse of the consumers. As regards the first, it hardly needs mention that one anna worth of ganja probably produces as much intoxication as that produced by a bottle of alcoholic liquor worth a rupee. As regards the second point, the consumers of ganja are generally poorer than those of alcoholic liquor. On the whole therefore any alteration in the amount of taxation is not desirable.

66. The different rates at present in force should be adhered to. The principle is based upon the quantity of narcotic resin present in each variety of Rajshahi ganja. As regards the Gurjat ganja, the above principle cannot be applied. As the ganja is a wilder variety of *cannabis*, the narcotic properties appear to be present along with some other resins making this variety stronger, though it does not possess the characteristic flavour and other desirable qualities. The present taxation appears to me fair.

67 and 68. No.

69. Yes; until the people of the locality where a shop is intended to be opened apply for one, and their requirements are enquired into to our satisfaction by an excise officer, no shop is opened. In the case of municipal towns the opinion of the Commissioners should be taken. Local opinion ought to be considered.

70. See my replies to questions 58, 59, and 64.

NOTE 1.—Gurjat ganja.

Cultivation.—The ganja plant is not, as a rule, cultivated on a large scale in the Gurjats. Of the Tributary States of Orissa that have come under my observation, I noticed ganja cultivated comparatively to a large extent only in the State of Khandpara. In the Gurjats, ganja grows wild, and is not usually cultivated with a view to obtain a large profit out of it. The seeds are neither selected to improve the quality nor preserved with a care to insure the power of germination. Almost every consumer has in his nook or corner a few straggling plants grown either spontaneously or from seeds almost sown broadcast on the land. The soil is never specially prepared for the purpose and is scarcely manured. The plant is almost left to thrive as best as it can under the varying conditions of soil, moisture, and atmospheric conditions.

Preparation.—Only two preparations are made out of the plant. The leaves of both the male and female plants are utilized for use as patti, while the twigs and the flowering tops constituting the inflorescences of the female plants are carefully cut down for use as ganja. It must be noted, however, that the two sexes of the plant are allowed to grow indiscriminately and are never separated, nor the male plants are ever uprooted to prevent impregnation. As a consequence of the free growth of both the male and female plants together, the ganja obtained usually contains a large quantity of seeds.

Qualities.—Herein lies the especial difference between the Rajshahi and the Gurjat ganja. As a result of wild growth of the Gurjat plants, the properties of ganja valued by the consumers are wanting in this ganja, and the drug is therefore less valued by them than the cultivated variety of Rajshahi. There is absence of flavour peculiar to the Rajshahi ganja. It irritates the throat, and I am told even irritates and produces a burning sensation in the stomach of the smokers who are not habituated to it. It brings on dysentery and often colic in the same persons. It is

decidedly more harmful and stronger than the Rajshahi drug. In fact, the difference between the Rajshahi and the Gurjat ganja is the same as is found between the cultivated and the wild variety of the same plant.

Consumption.—It is, as a rule, consumed in the Tributary States and in the British territory along the frontier in Orissa. People living in other parts of Orissa who have acquired the habit of ganja-smoking, but can ill afford to pay the high price of the Rajshahi drug generally smuggle Gurjat ganja for their use. It is reported also to have gradually found its way in Chota Nagpur and Central Provinces. I have stated in my replies that the Pandas (hereditary priests) of Jagannath at Puri, habitually consume a large quantity of the Gurjat ganja as patti with the addition of the usual bhang massalas.

NOTE 2.—Veteran smokers of ganja are almost unanimous in saying that quick and successive repetitions of the ganja within a rather short time has no marked intoxicating effect in proportion to the number of times it is smoked. The intoxication seems to have a limit both as regards its duration and its degree. It is all the same to them if they smoke a dozen chillums or one or two. The first chillum produces the effect which does not increase in intensity during the successive repetition of smoking, and I have observed no appreciable difference either in their behaviour or in their countenance bespeaking increased intoxication. Of course these remarks are only applicable to those smokers who have been long accustomed to the drug.

NOTE 3.—I have seen a young Hindu sanyasi in company of seven others to smoke ten or twelve chillums of ganja in succession within an hour and a half. He is about eighteen years old, and he became a sanyasi (so he said) in his thirteenth year. After his usual morning ablution he came to me with steady gait and clear eyes. His motions were free, and there was nothing to show that he had taken any intoxicant that morning. I gave him a quantity of ganja, and he smoked before me. I observed that his eyes became gradually dull, red, and watery. He seemed all along very devout, but with the progress of ganja-smoking he became more and more devout, as was noticed by his constant repetition of the name of *Bhagwan* (God). Gradually his limbs seemed to lose the former freedom to some extent. But he could walk back straight to his temporary abode under a Banian tree, uttering the name of *Bhagwan*. His companions, who were grown-up men, did not show any signs of intoxication.

Oral evidence.

Question 1.—I have been in Government service since January 1880, and in the Excise Department since 1891. I became Special Deputy Collector on land acquisition work in 1884, and in September 1891 Special Excise Deputy Collector.

I was ordered to make enquiry into the shops existing in the Gurjat within three miles of the frontier, and toured in the country for that purpose. I found no cultivation of the ganja plant in fields, but scattered cultivation of a few plants in the enclosures attached to the houses. The number of plants so cultivated sometimes reached as many as fifty. Such cultivation would be found in every second village. The average number of plants was ten. Plantains, mango trees, cotton plants and spices were found growing in the same enclosures as the hemp plants. I

submitted a report of my enquiries, I think, in 1893. The report is still, I believe, under the consideration of Government. There was at the time of my enquiries no prohibition to the cultivation in the Gurjat. Nor was there any against shops within the three miles belt. The object of my enquiry was to ascertain how far the existence of shops and cultivation within the belt injured the Government revenue. Every man who cultivated the plant was also a seller. He sold to people passing through the village, chiefly to British subjects, who came specially to buy the drug. These persons generally bought for their own consumption, and carried away only small parcels. The cultivation appeared to be by sowing the seed broadcast. Every cultivator was a vendor, and there were no shops. There are no shops now. The cultivators carried the ganja to the bazaar and sold it there like any other vegetable. I saw this is one instance myself, and heard other instances of it. The amount of this ganja, which enters the Cuttack district in one year, I am unable to estimate in maunds; but the practice was general all along the frontier of the Cuttack district. Besides those persons who import ganja from the Gurjat for their own consumption, there are others who bring in much larger quantities and sell it for profit. The bulk of the ganja consumed within a distance of seven or eight miles of the frontier is imported in one or other of these ways. The instances given at the end of my answer 8 refer to these larger importations. In one case as much as 1 maund and 7 seers of ganja and patti together were discovered. I estimate the whole of such smuggling for the last two years at 8 maunds per annum. I arrive at this figure by comparing the recorded consumption, 112 maunds (*vide* 25), with what I believe the true consumption to be, *viz.*, 120 maunds.

Question 5.—The plant does not grow wild in British territory as far as I know. But it does grow spontaneously throughout the Gurjat. I saw it growing wild in the three-mile belt, and I was told it grew wild beyond that limit. In one instance, I saw it growing in the jungle at one mile's distance from any house. There was only one plant, and it was by the side of a jungle path. I do not think it grows wild much within the three-miles limit. Formerly there was prohibition to cultivation on the three-mile belt, and all the plants were uprooted. Still I was able to find some wild plants within the belt after the prohibition was withdrawn, and I infer that there must be more wild growth where no prohibition ever existed.

Question 8.—There is no licit consumption of Gurjat ganja in the Cuttack district, because when I wrote my reply the license vendors were not allowed to import less than eight maunds at a time, and they could not conveniently collect that amount in the Tributary Mahals (*vide* 59). The rule permitting import on payment of duty was, therefore, a dead-letter. Recently the eight maunds minimum has been reduced to one maund; but there has not yet been time to note the effect of this change. Formerly, *i.e.*, in the years 1878-79 and 1879-80, there was a little licit importation; but since then there has been none. I make this statement on careful examination of the figures.

Question 19.—The Gurjat ganja is used principally for smoking in the Cuttack district and in the Tributary Mahals, and for drinking in the town of Puri. Patti or bhang is licitly imported from the Gurjat. It consists of the leaves of the plant only, male and female.

I caused some smokers to smoke before me, and I supplied them with Gurjat and Rajshahi ganja. The old smokers of Rajshahi ganja said the Gurjat ganja produced a burning sensation in the pit of their stomach, and also that it would produce dysentery and similar pain if they are unaccustomed to it. Those accustomed to Gurjat ganja do not feel these ill-effects. There were ten smokers, four of whom were old smokers able to distinguish the two kinds of ganja, and the above was the opinion of these four. The general opinion is that Gurjat ganja is the stronger and the more harmful.

Question 45.—The opinion regarding the tendency of the drug to produce insanity in persons of weak brains and those that have a hereditary predisposition to it is not based on my own experience. It is derived from other persons.

The remark about the effect of the use of dhatura and kuchila is based on a case in which an acquaintance of mine who was unaccustomed to ganja had ganja mixed with dhatura given to him, with the result that he became temporarily insane. Kuchila is stronger than dhatura, and I

presume, therefore, its effects would be stronger. I have been told of other cases. I have also heard that since the price of ganja was raised people have taken to mixing dhatura seeds with it. Some of the consumers themselves told me this—about ten people. I have also been told that for the same reason the kernel and root of the kannair (*Thevetia nerifolia*) is mixed with ganja. Kuchila has come into use for the same cause. I believe this information.

Question 59.—I think that if the prohibition of growth were enforced within the three-mile belt, the consumption of the shops along the British frontier would be improved, provided they were kept well supplied with Gurjat ganja, i.e., the cheaper drug. I say Gurjat ganja, because it is cheaper and people are accustomed to it along the frontier, not because I think the Rajshahi ganja is more baneful.

Question 70.—Gurjat ganja can be got easily within six or seven miles of the Gurjat frontier. In one case, however, a seizure was made twenty-five miles from the frontier, and in another within the town of Cuttack itself.

63. *Evidence of BABU ABHILAS CHANDRA MUKERJEE, Brahmin, Deputy Magistrate and Deputy Collector, on deputation as 2nd Inspector of Excise, Bengal.*

1. I had travelled over parts of the North-Western Provinces and the Punjab (Simla) with the Government of India on duty.

I was Deputy Magistrate and Excise Deputy Collector of Rajshahi, and had to control the work of the ganja mahal at Naogaon in connection with the cultivation, manufacture, storage, and exportation of ganja to different districts and provinces. I had to supervise the work of officers employed in the ganja tract and inspect the Naogaon Ganja Office, etc.

In June 1891 my services were placed at the disposal of the Board of Revenue, with the designation of 2nd Inspector of Excise, Bengal, and I have to inspect the excise work of the Dacca, Presidency, Rajshahi, Chittagong, and Orissa Divisions. I have travelled over every part of the following districts* as 2nd Inspector of Excise, Bengal.

2. Bhang; charas; ganja, flat, round, chur may be accepted.

There is another variety of ganja called *mihidal* (small twigs); it is manufactured just in the same way as flat ganja, and the agglutinated flower tops assume a flattened shape. They are the dried flowering tops of the smaller twigs of the female hemp plant; they contain less wood and more ganja. The duty on this ganja is the same as that levied on round ganja. Round ganja is used in Calcutta and the neighbouring districts, but small twigs or *mihidal* ganja is largely used in the other districts. Most of the so-called round ganja consumed in different districts is no other than *mihidal*. Round ganja is prepared by trained men sent to Naogaon by the goladars of Calcutta, and they live in the ganja tract during the manufacturing season.

160 tolas of large twig, flat, make 100 tolas of chur.
132 „ „ small twig, flat, make 100 „ „
128 „ „ round ganja make 100 „ „

* Table of districts not printed.

They are locally known by the following names:—

General name for ganja ...Siddhi, tamak (called tamak or tobacco by the smokers in the presence of unknown persons), ganja, and sham chini. Siddhi is the polite term for ganja in East Bengal.

Charas	...	...Charas.
Bhang	...	...Bhang, siddhi, patti, and bhangar pata.
Flat	...	...{ Chepti. Dali. Gol.
Round	...	...{ Jasuria ganja. Mihidal. Gol.
Small twigs	...	...{ Chhoto dala. Chur.
Chur	...	...{ Rora.

3. I have seen the hemp plant growing in the following districts:—

Mymensingh, Dacca, Faridpur, Backergunge, in the Dacca Division.

Noakhali, Tippera, Chittagong, in the Chittagong Division.

Rangpur, Dinajpur, Bogra, Jalpaiguri, Rajshahi, Pubna, in the Rajshahi Division.

Nadia, Jessore, Khulna, 24-Parganas, Murshidabad, in the Presidency Division.

Cuttack, Puri, Balasore, in the Orissa Division.

It grows abundant all over Bengal.

24-Parganas.—Specially in the Basirhat Sub-division.

Nadia.—Meherpur (Chuadanga) and Kushtia Sub-divisions.

Khulna.—Sadar and Satkhira Sub-divisions.

Jessore.—Magura, Narail, Jhenida, and Sadar Sub-divisions.

It grows most abundant in the Jessore District.

Rajshahi Division.—The wild bhang grows largely. No duty-paid bhang is consumed in any district in the Rajshahi Division. It grows most luxuriantly all over the division. Even on the sides of the railway line (Northern Bengal State Railway) passing through the districts of Rajshahi, Bogra, Dinajpur, Rangpur, and Jalpaiguri.

Dacca District.—Hemp plant grows spontaneously all over the Dacca District, and specially in the Manikgunge Sub-division (at Lasragunge, Jhitka, Jaffergunge, Gheore, etc.), on the banks of rivers at Toke, and on low lands adjoining people's houses.

Below is given the names of places in which it grows abundantly in the Mymensingh District:—

(a) On the slopy banks of the rivers Brahmaputra and Kansa.

(b) **Sadar Sub-division.**—Essurgunge Thana, Muktagacha, Fulberia Thana, Fulpur Thana, Saltia (old Indigo Factory), Birunia (old Indigo Factory). It affords shelter to tigers.

(c) **Netrokona and Kissoregunge Sub-divisions.**—East Mymensingh.

Jariar Banda.—In the Durgapur Thana (about thirty miles from the town of Mymensingh) bhang plants grow wild over an area of twenty square miles. The land is covered over with long grass and bhang plants, and the tract is inhabited by wild buffaloes.

From Hosseinpur to Kissoregunge Sub-divisional Head-Quarters the hemp plant grows wild on both sides of the road. It grows wild on the sites of abandoned indigo factories in that Sub-division at Darinagar, Badia, Kotiadi, Matkhola, and Bazidpur.

(d) **Jamalpur Sub-division.**—In the Jamalpur Sub-division at Bahajuri (several acres of land are covered with the wild hemp plant). It also grows on the banks of the river Brahmaputra and on lands adjoining abandoned indigo factories at Bagunbari, Nandina, etc.

(e) In Tangail Sub-division it grows abundantly at Kagmari, Jamurki, Elunga, Sealkole, Soya, Tangail town, Subarnokali, Patal, Nagarpur, Bhadra, etc.

4. The wild plant is known by the name of—

Bhang	{	Siddhi.	Ganja	{	Ganja.
		Bhang.			Siddhi.
		Bhanger pata.			
		Patti.			

Siddhi and ganja are synonymous terms for ganja in Dacca, Mymensingh, Faridpur, Backergunge, Khulna, etc.

Jata bhang, siva jata bhang:—the flower of this kind of bhang is whitish; it grows luxuriantly, and the plants are of a larger size than the ordinary wild hemp plant. The flowers resemble ganja flowers. The flowers and leaves agglutinate naturally and look like siva jata (cluster of hair of the god Siva, from which it derives its name). Its intoxicating properties are less than those of

the Rajshahi ganja. The flowers are collected and smoked just like ganja. It grows along with other hemp plants rather scantily. It grows near Toke and in some parts of the Manikgunge Sub-division of the Dacca District.

In Mymensingh there are two varieties of bhang plants,—one with whitish stem, and the other with reddish stem. The leaves are green. The different terms used for bhang plants refer to exactly the same plant.

5. For the growth of the wild hemp the special conditions necessary are—

Climate.—The wild hemp plant grows in damp and moist (as in river districts) climate.

Soil.—It grows luxuriantly in moist, sandy soil richly manured with decomposed vegetable matter. It grows in damp, loose, soft soil, neither high nor low, and where it grows wild, the soil shows a natural disposition to produce it. It grows in soft, damp soil near cowsheds, where cowdung is deposited or thrown, and on low, damp, fallow lands attached to people's houses. In old abandoned houses and on the sites of old and abandoned indigo factories it grows dense. Where the ashes are thrown, and where vegetable matters decompose and are converted into manure, it grows luxuriantly. Sandy soil or soil covered over with silt after the subsidence of the floods (on the banks of rivers) contributes much to a rich growth of the plant. In 1890-91 there was a great flood in the ganja mahal, and more than 1,000 bighas of land were submerged, and plants mostly destroyed. But the surviving plants grew very luxuriantly, and the average outturn of ganja was 4 maunds 23½ seers per bigha, and the quality of the ganja was exceptionally good.

Rainfall.—In years of excessive rainfall the plants are destroyed. If the roots remain under water for a few days, the plants die. In the rainy season the growth is rather stunted, and plants are destroyed altogether if there is accumulation of water at their roots.

Elevation, etc.—Wild bhang growing on elevated places is not so luxuriant as in low lands. It is stunted. Leaves of plants growing on elevated and sunny places have more intoxicating properties. Bhang does not grow luxuriantly in the high lands of the Bhawal pargana in Dacca.

6. The plants grow spontaneously in November and December; they bear seed in March and April, and the seeds fall off in May. The leaves which become partially dry fall off as soon as the rains set in in June. The people collect the leaves on the last day of the Bengali year (Chaitra Sankranti), and in March and April before the rains set in. The dried bhang plants growing near people's houses are used as fuel by the poor. The seeds that fall to the ground germinate, and small plants again grow in the rainy season, but they die out as soon as the rain water collects at their roots.

The wild hemp plant ordinarily grows dense, and it is not scattered.

7. Cultivation of the hemp plant—

(a) The extent of the ganja cultivation in 1892-93 is shown below:—

Districts.	Thana.	Number of villages.	Number of cultivators.	Area in bigha cultivated.
Rajshahi.	Naogaon.	95	1,922	2,278
Bogra.	Adamdighi, Nawabgunge	68	468	479
Dinajpur	Mahadebpur	35	469	679
TOTAL		198	2,879	3,336

(b) No charas.

(c) There is no cultivation of bhang, but the growth is fostered in some cases.

The cultivation is resorted to primarily with the object of growing ganja; if it fails, the leaves are used as bhang. Bhang grows spontaneously all over Bengal, and its cultivation is rare. Illicit cultivation is generally decreasing through the vigilance of Excise and Police officers.

(d) It is not cultivated solely for its fibre or seeds.

The formation of seed cannot entirely be prevented by the destruction of the male plants, as there are seeds in the Rajshahi ganja exported, and the seeds of the Rajshahi ganja are used for the cultivation of ganja plants in the ganja mahal. The wild hemp grows wild from the seeds of the wild hemp. Ganja plants are illicitly reared from the seeds of the Rajshahi ganja.

8. The area of the ganja mahal is not decreasing, as the following figures will show:—

(Figures from 1854 to 1876 will be found in Babu Hem Chandra Ker's report.)

Year.	No. of applications.	Area for which licenses issued.	Area actually cultivated.	Total outturn.	Average outturn per bigha.	Quantity exported in maunds.	REMARKS.
		Bgs. Cottas.	Bgs. Cottas.	Mds. Srs.	Mds. Srs.		
1883-84	1,973	2,072 1	2,014 0	7,076 28	3 20	8,260	
1884-85	1,525	1,394 6	1,361 0	3,887 32	2 34	7,014	
1885-86	1,036	2,296 13	2,169 0	7,926 13	3 24	7,060	
1886-87	1,618	1,918 12	1,780 0	7,821 11	4 15	7,881	
1887-88	1,263	2,489 5	2,433 0	8,266 24	3 15	8,224	
1888-89	1,531	2,434 5	2,408 0	8,021 37	11 13	7,982	
1889-90	1,678	2,861 10	2,669 0	6,681 29	2 20	7,583	
1890-91	1,623	2,464 2	1,315 0	6,040 6	4 23½	7,490	
1891-92	1,928	3,748 8	3,644 10	7,575 5	2 3½	6,952	
1892-93	1,579	3,336 16	I could not get figures for these columns.				

In 1856, 2,608 bighas and 10 cottas of land were under cultivation, but in 1891-92 the figure was no less than 3,644 bighas and 10 cottas (the maximum). In 1892-93 licenses were issued for the cultivation of 3,336 bighas and 16 cottas. The outturn in 1856 was 20,868 maunds and 19 seers, but the outturn in 1891-92 was 7,575 maunds and 5 seers, or nearly one-third of what it was in 1856.

The plants for the manufacture of bhang and charas are not cultivated in Bengal.

9. The plant is grown on the same high land as that which is required in the same district (Rajshahi) for the mulberry cultivation. Seeds preserved from the previous crop are sown towards the end of August in a carefully prepared plot of light, dry, sandy loam, which had been ploughed about once every week from the middle of May. When the hemp plant grows, earth, ashes, and cowdung are thrown at their root as manure with the view of promoting their growth for the production of ganja. The methods of cultivation are the same as those given in Babu Hem Chandra Ker's report.

The ganja crop is a highly exhausting one; consequently, the ganja plots have to lie for two years after carrying a hemp crop either fallow or under a rotation of pulses, mustard, and such like lighter crops. Roughly, therefore, of the high lands on which ganja grows, only about a third throughout the ganja mahal can be under hemp in any given year. There is a tendency on the part of the cultivators to grow other crops in place of ganja. The cultivation of sugarcane and mulberry is suited for these high lands, which the cultivators find nearly as remunerative and much less troublesome both in itself and from the absence of the fiscal restrictions that necessarily accompany ganja-growing.

10. The persons who cultivate the ganja plants (hemp) do not form a separate class. They cultivate paddy, ganja, pulses, sugarcane, etc. They are of the same class as the other agricultural cultivators. Trained men are, however, required for the cultivation of ganja, as the ganja doctor who eradicates the male plants.

11. With the seed of the wild hemp ganja is not cultivated. I have made no experiment whether the plants cultivated for the production of ganja can ever be raised from the seeds of the wild hemp. In almost all the districts in which cases of illicit cultivation have been detected the plants had been grown from the seeds of the Rajshahi ganja. Seeds of the Rajshahi ganja are used for the illicit cultivation of the ganja plant in the mufassal.

12. The so-called wild hemp is specially cultivated for the production of ganja in the Gurjat States in Orissa and in Hill Tippera, but not in Bengal. Only one kind (flat) of ganja is manufactured. Ganja is grown in almost all the Gurjat States bordering on the districts of Cuttack, Puri, and Balasore, and in the tracts in Hill Tippera bordering on the Tippera District. In the Gurjat States as well as in Hill Tippera it is clearly cultivated in every case, and apparently the male plant is eradicated, but not so early or so completely as in North Bengal.

Wild bhang is not cultivated for the production of ganja in Bengal, and the male plants are not extirpated, because the people are ignorant of the distinction between the male and the female plants. In the ganja-producing tracts this is done by experts.

The quality of the ganja manufactured in the Gurjats and in Hill Tippera is decidedly inferior to that of the Rajshahi ganja, and smokers do not like it for smoking. In the manufacture drying is not so carefully attended to, and a fermentation process that occurs gives these ganjas usually a heavy, rancid, and disagreeable odour. The leaves, too, are less completely removed, and the ganja as a commercial article is so inferior that in Puri, where the two kinds of ganja are sold, Rajshahi ganja is sold at six annas a tola, whereas the Gurjat ganja sells at two annas for the same quantity.

13. (a) Cultivation of the hemp plant for ganja is restricted in Bengal to the districts of Bogra, Dinajpur, and Rajshahi.

The cultivation was flourishing in Jessore in 1843, and was continued down to 1875, when it was stopped under the orders of the Board. About 1722 A.D., ganja was for the first time cultivated in the village of Balubhora, in the district of Bogra, and in that of Muradpur in Rajshahi, which adjoins it, the seeds having been imported from Kushtea, where there were shops for the sale of the drug. The cultivation proving remunerative was gradually extended to several other villages.

I cannot say why the districts of Rajshahi, Bogra, and Dinajpur were selected.

Ganja can be cultivated in every district in my jurisdiction (where wild bhang grows) if not restricted; but the quality of the ganja will not be so good as that grown in the ganja mahal. Even the ganja cultivated and manufactured in the Sibpur Experimental Farm was not so good in quality as the Rajshahi ganja.

(b) For special conditions necessary for the cultivation of the hemp plant for producing ganja, *vide* answer to question 5. Ganja can be cultivated in places where wild hemp plant grows.

(c) There is no part of Bengal where its cultivation would be impossible.

14. (a) Ganja, yes (*vide* answers to questions 7 and 8).

(b) Charas, no.

(c) Bhang.—Wild bhang is prepared in all the districts in Bengal to a small extent.

15. Particulars regarding methods of preparation:—

Ganja—Cultivated.—As in Babu Hem Chandra Ker's report. *Uncultivated.*—As Sibjata bhang (answer to question 4). The flowers with the leaves are dried in the sun after cutting the plant. There is no difference in the preparation of ganja for (A) smoking, (B) eating, and (C) drinking.

Bhang—Cultivated.—No experience. *Uncultivated.*—Wild bhang plants are cut and dried, and the leaves are then removed from the plant and stored. There is no difference in preparation for (A) smoking, (B) eating, and (C) drinking. In Dacca wild hemp plant is gathered on the last day of Chaitra, for the bhang gathered on the Maha Bishub Sankranti is considered auspicious. It is popularly believed that bhang drinkers obtain success in every undertaking. Wild bhang leaves are at first dried in the sun. They are next boiled in milk and water, and dried again in the sun and kept in earthen vessels. Every family keeps it. Bhang plants are used as fuel. Milk boiled with dry bhang plant as fuel becomes sweet and tasty. In Rangpur bhang leaves (*sak*) are fried with other vegetables and eaten like any other sak with rice. It produces intoxication and allays fatigue and bodily pain.

Charas.—Charas is smoked in Bengal. No experience about its preparation.

16. (a) Bhang is generally prepared by the people in their houses where wild bhang grows. It is sometimes illicitly cultivated and reared.

(b) Bhang can be prepared from the hemp plant wherever grown.

(c) *Charas.*—I have no experience.

Ganja can be prepared from the wild plant wherever grown if the flower is formed. The method of preparation is very simple (*vide* Babu Hem Chandra Ker's report).

17. *Ganja.*—The ganja manufacturers in the ganja mahal are ordinary cultivators. They are generally Muhammadans.

Bhang.—Wild bhang is manufactured by all classes of the people where they grow, especially for medicinal and intoxicating purposes.

Ganja. Bhang. Charas.

18. (a) Deteriorate by keeping Yes. Yes. Yes.
 (b) Does it quite lose its effect in time? . After 3 years. After 3 years. Keeps longer.
 (c) How long does it keep good with ordinary care? . 2 years. 2 years. Ditto.
 (d) What are the causes of deterioration?

Ganja.—The cause of deterioration is the absorption of moisture and the consequent loss of its resin, that is its intoxicating properties. Exposure to air and damp atmosphere causes deterioration. Insects also grow and eat away the active properties.

Bhang.—Before the rains the wild bhang leaves keep well on standing plants. After the rains the leaves fall off and lose much of their intoxicating properties. Bhang plants can live for one or two years. The leaves do not deteriorate for two years, after which insects eat them up (partially). Everything has its assigned life, and the active properties are decomposed naturally.

(e) Special measures for preventing deterioration:—I think if it is kept hermetically sealed, it can be preserved in a good condition longer.

19. Ganja and charas are generally used only for smoking. But Gurjat ganja is used for drinking by the priests—pandas at Puri, Satyabadi, and Bhubaneswar in Orissa. Some sanyasis and fakirs chew and eat ganja raw in Bengal.

Majum is prepared in the Dacca town from ganja. Ganja half a poa (2 chbittaks) is smashed and mixed with syrup prepared from $1\frac{1}{4}$ seers of sugar. The mixture is boiled; then it is allowed to cool; afterwards it is cut into small pieces (small tablets). The vendor generally takes a seer of ganja every month for making majum. It is sold at ₹2 to ₹3 per seer to retail vendors. It is consumed by Kayasths, Muhammadans, traders (Sahus and Basaks), up-country people, etc.

Ganja-smoking.—The leaves and seeds are separated from the ganja; a little water is then added; it is thus washed thrice. It is then placed on the palm of the left hand and pressed six times with the right forefinger. It is then cut. It is again pressed six times for the second time, and cut again. It is then pressed six times for the third and last time, and cut finally. Three cuts and eighteen times pressing make the ganja fit for smoking. A little prepared tobacco is first put into the chillum; next the prepared ganja is placed on it. For a chillum one pice worth of ganja ($\frac{1}{16}$ of a tola in weight, at 4 annas per tola) or two pice worth of ganja ($\frac{1}{8}$ of a tola in weight, at 8 annas per tola) can be consumed by two or three

persons. Upon the ganja burning charcoal cakes or *tika* (slow fire) is placed. The smoke is inhaled thrice. It is carried to the stomach with the third pull, where it is retained for a minute or so. It is then allowed to escape through nostrils (keeping the mouth shut). Old and habitual smokers can retain the smoke longer in the stomach, and beginners can retain it for a few seconds only. The ganja is covered over with dried tobacco leaves. Tobacco is used to render it mellow. After washing, it is cut, pressed, and smoked. Dr. O'Shaughnessy also gives a description of ganja-smoking in his *Dispensatory*, Vol 1, page 583.

Charas smoking.—One pice worth of charas is heated a little in order to soften it, and is then mixed with double the quantity of tobacco. It is then placed on the palm of the left hand, and pressed several times with the right forefinger with a view to mix up the tobacco and charas completely. It is then put in a chillum and smoked like tobacco. Charas-smoking renders the eyes bloodshot and heavy. The smoker remains for a few minutes with half closed eyes. The effect does not last very long. It lasts for half an hour. The smoke is retained in the stomach for a minute or a few seconds, according to proficiency in smoking, and then let off through the nostrils and mouth.

Some people smoke charas raw, *i. e.*, without mixing with tobacco, and some others in hukas. In Dacca the Sahus of Sabhar and the Basaks of Dacca as a rule smoke it.

20. I give below the classes and the proportion of consumers in the Dacca and Mymensingh Districts. The consumption of ganja in Mymensingh is next to that of Calcutta.

	Ganja.	Charas.
(1) Cultivators	20 per cent.	Nil.
(2) Boatmen	40 "	Nil.
(3) Fishermen	60 "	Nil.
(4) Bairagi, sanyasi, and fakir	80 "	Nil.
(5) Washermen, Chandal, Namasudra, mali (sweepers and mehters), goalas, banias, dome and cooks	40 "	Nil.
(6) Tradesmen (Basaks and Sahus)	30 "	10 per cent.
(7) Coolies and day-labourers	60 "	Nil.
(8) Bhadrak (idle persons), Brahmins, and Kayastha in Bikrampur, Sherpur side, and Muktagacha	20 "	5 per cent.
(9) Prostitutes who cannot afford to pay for the high price of country spirit, and old women of lower classes, such as fish-women, bagdi, etc.	70 "	Nil.
(10) Ganja is used by bhadrak in Dacca and Mymensingh as a preventive against rheumatism	10 "	Nil.
(11) Mantra-data Gossein, spiritual preceptors or gurus	10 "	5 per cent.
(12) Carpenters, artizans, etc., palki-bearers, blacksmiths, etc.	40 "	Nil.
(13) Low class up-country people, such as kurmi, kairi, bearer, goar, gour, rowani, tatawa, jola, dome, mochar, nunia, dosad, muohi, who cannot pay for the high price of distillery liquor, have taken to ganja smoking	25 "	Nil.

Thirty per cent. of the total population smoke ganja.

Less than $\frac{1}{10}$ per cent. smoke charas.

Ten per cent. drink bhang (taxed and untaxed).

Ganja is smoked by all classes, both Hindus and Muhammadans.

Forty per cent. of the Muhammadans and 30 per cent. of the Hindus smoke ganja.

21. Among the ganja-smokers opinion varies very considerably as to the narcotic effects of the different varieties of ganja sold in the markets. Those who are in the habit of using flat ganja will not, if they can help it, touch round ganja, while those who are accustomed to the round sort will not relish the flat drug. Round ganja is preferred in Calcutta, 24-Parganas, and its neighbourhood. It is not used in many districts. It is popularly believed in East Bengal that round ganja produces headache. Flat ganja is preferred in the Dacca and Chittagong and Itajshahi Divisions. It is said to possess greater intoxicating property than either round or chur. Small twig (mihidal) ganja is used in almost all districts; its duty is the same as that for round ganja. The consumption of chur ganja has increased of late:—

Year.	Quantities exported from Naogaon.		
	Mds.	S.	C.
1890-91	926	23	6½
1891-92	600	39	4
1892-93	1,659	9	0

Flat is largely used, next to it the small twigs then the chur, and the least is round ganja in mufassal districts (round ganja is largely used in Calcutta and its neighbourhood).

My idea is that the consumption depends much on the ganja vendor and on the cheap retail selling price of the drug. Poor men make no distinction. In different sub-divisions of the same district different kinds of ganja are consumed. Taking, for example, Mymensingh:—

Saddar, Jamalpur, Netrokona, and Kissoregunge Sub-divisions	Flat and small twigs ganja.
Tangail Sub-division	Flat and chur ganja.

22. Foreign charas is chiefly used. Charas is imported to Bengal from Amritsar (in the Punjab) and Mirzapur (in the North-Western Provinces).

23. Wild bhang is to a small extent used by lower and poorer classes rarely for smoking. Those that smoke bhang cut the *sir kali*, the top of the plant, and dry it and preserve it. When ganja is not available, bhang is smoked like ganja in chillums (no hukas is used). Poor people who cannot pay for the high price of ganja, or who cannot procure ganja at the hour of smoking, at times smoke bhang. The bhang leaves are mixed with tobacco, and then smoked as tobacco in a chillum.

In all places where wild bhang grows, especially in the Dacca and Mymensingh Districts.

By the poorer classes who cannot afford to pay for ganja, to a very small extent.

24. Bhang is in general use amongst all classes, especially in the North-Western Provinces and Behar. In Bengal, brandy has superseded the old bhang at present, but I well remember having seen in the days of my boyhood the free use of bhang among the better classes of people who would have shunned any one of their number as a pariah who was found to be addicted to the use of the forbidden spirituous liquor. At the gate of many rich people, zamindars, etc., Hindustani darwans can still be seen rubbing the bhang in a stone mortar with a long wooden pestle, and the paste so prepared is not solely intended for the use of the servants. I do not mean to say that all classes of Hindus without exception are or were ever addicted to the use of bhang. Many up-country men and many Bengalis are as a rule very

temperate in their habits, and do not use any narcotic at all; but the ordinary run of orthodox Hindus, accustomed to have their little excitements, use bhang for the purpose without incurring any opprobrium attached to the use of spirituous liquors. Bhang is the up-country people's favourite drink.

Classes—

	Proportion of people who eat.	Proportion of people who drink.
(1) Bhadrak and high caste up-country people, Brahmins, and Chhatris, who do not drink wine and smoke ganja, generally use bhang	5 per cent.	30 per cent.
(2) Pandas and Mahantas at Tarakeswar and Baidyanath who have a prejudice against liquor . . .	10	70
(3) Traders (Sahus of Dacca) . . .	5	15
(4) Bengali high caste people . . .	2	10
(5) Muhammadans . . .	10	5

Bhang is drunk in all localities. It is eaten by some of the higher class people in Calcutta in the form of pastry, such as *bhang kachuri* (bhang is mixed with the pastry made of flour, spices, boiled pulses, etc., and then fried in ghi—(clarified butter), *bhang kulpi* (bhang ice cream, bhang smashed and mixed with condensed milk, sugar, rose-water, aniseed, etc., and then frozen), and in the form of *majum*. (Boiled with ghi over water, the leaves part with a portion of their peculiar resin to the ghi, which floats on the water in the form of a green jelly. A portion of this jelly mixed with dried milk and syrup over a fire produces a paste, which readily hardens when cooled, and it is then cut into small tablets. This is called *majum* or *majum*, which is a favourite form of taking the drug.) Dr. O'Shaughnessy has given a detailed account of the preparation of *majum* in his *Bengal Dispensatory*, Vol. I, page 583.

Bhang used for drinking.—Dr. O'Shaughnessy in his *Bengal Dispensatory*, pages 582 and 583, gives a description of how bhang is drunk and its effect on the system.

The dried leaves are repeatedly washed to remove the green colouring matter; then pounded into a fine paste with a few grains of aniseed diluted with water, and drunk as a refreshing draught. The quantity taken at a time varies from quarter to one tola of the dried leaves. Dried rose leaves pounded, black pepper, rose-water, and sugar are added to the draught according to taste. To the uninitiated a draught of a tola is enough to produce strong intoxication with a tendency to laughter, great thirst, and constriction of the throat, followed by a peculiar sensation of everything tumbling upside down and protracted sleep; but those who are accustomed to the drink feel nothing beyond a pleasant sensation of intoxication, with a more or less obliviousness of all mundane cares. The effect, however, varies greatly according to constitution and temperament.

25. The use of ganja, charas and bhang is on the decrease. The statistics show that the consumption has decreased by half during the last twenty years, and that the consumption has not increased with the increase of population. The decrease is due to high retail selling price on account of increase of duty and license fees. Formerly a large number of respectable people used to consume ganja on account of religious prejudice, but now they have taken to drinking.

Ganja. Bhang. Charas.
Per cent. Per cent. Per cent.

26. (a) Habitual moderate consumers	75	30	70
(b) Habitual excessive consumers...	10	5	5
(c) Occasional moderate consumers	14	60	23
(d) Occasional excessive consumers	1	5	2

27. Ganja.—Classes.—

(a) *Habitual moderate.*—Fishermen, cultivators, coolies and day-labourers, singers (jatra-walas), boatmen, mehters, domes, prostitutes, artisans, blacksmiths cooks, etc.

Habits of life, etc.—These are all poor people, and cannot pay for country spirit. It is used as a narcotic to relieve fatigue and exposure to damp climate, sun, rain and fire, as a preventive against rheumatism, fever, etc., on account of religious prejudice against country spirit (as Muhammadans).

(b) *Habitual excessive.*—Sanyasi, bairagi, fakir, ramait, etc. These people give up worldly pleasures and enjoyments and temporal concerns. For concentration of thought and for forgetting all worldly cares and anxieties, for control over the passions and as a preventive against diseases consequent on exposure, climatic influence, on account of religious prejudice against country spirit, on account of its cheap price, and on account of the holy sentiment attached to the smoking of the drug (a favourite intoxicant of the god of gods—Siva) ganja is used.

(c) *Occasional moderate.*—Bhadrakok young people in Trinath mela, newly initiated (beginners).

Ganja is smoked for the purpose of intoxication and for aphrodisiac purposes. It is used by young men of loose morals, who cannot pay for the high price of country spirit. Young people who are afraid of being detected of drinking liquor and being looked down upon by society, or being admonished by their elders, sometimes smoke ganja as a safe narcotic. Young people suffering from venereal diseases learn to consume ganja in order to allay the pain, suffering, and uneasiness attending on the disease.

(d) *Occasional excessive.*—Sanyasis, bairagis, fakirs, and baishnavas on the occasion of Mohotsob, Baulmela, etc. Rheumatic patients, lepers, and asthmatic patients smoke to alleviate pain and deaden the sensation. People suffering from colic, asthma, and other painful diseases, venereal diseases, etc.

Habits, etc.—For intoxicating purpose. In honour of god Siva for religious purposes. Moderate habitual consumers sometimes become excessive consumers for drowning sorrow, etc., to allay pain as from leprosy, venereal diseases, etc.

Bhang.—(a) *Habitual moderate.*—High caste up-country people and bhadrakok who do not drink liquor, and who are suffering from bowel-complaints, and for aphrodisiac purposes.

Bhadralok for intoxicating purposes drink bhang paste (prepared from bhang, aniseed, black pepper, cucumber, and melon seeds, milk, sweets, attar, rose-water, and cocoanut water) diluted in water.

(b) Pandas and Mahantas at Baidyanath and Tarakeswar.

(c) By all classes on festive occasions and pujas. On the last day of the Durga Puja it is religiously offered to every guest and members of the family, and those who do not like to take it put a drop of it on their tongue (by way of acceptance).

For increasing the digestive power and appetite bhang is drunk. Sometimes eaten by young people for aphrodisiac purposes in the form of pastry (kachuri), ice cream, and sometimes drunk.

(d) Habitual moderate drinkers sometimes drink excessively on festive occasions.

Charas.—(a) *Habitual moderate*.—Well-to-do classes, both Hindus and Muhammadans, specially in the towns, smoke for intoxication. Traders, bhadralok, respectable Muhammadans, singers, dancing girls, and rich people, who meet in the evening at a baitak, and theatre people in the mufassal.

(b) *Habitual excessive*.—Rich people who meet in the evening at a baitak for singing and conversation.

(c) Young men of loose habits for intoxicating and aphrodisiac purposes, who do not like to be exposed, or who are afraid of being detected of using an intoxicant.

(d) Habitual moderate consumers consume in excess occasionally. Zamindars and rich people, when a large number of friends and companions meet, occasionally smoke as tobacco in excess.

28. The average allowance and the cost of the drug per diem.

(a) Habitual moderate smokers of ganja may be divided into three classes:—

(1) Bhadrlok, boatmen, etc., smoke ganja once early in the morning and once before going to bed at night. They smoke one or two pice worth of ganja each per day, $\frac{1}{8}$ or $\frac{1}{4}$ tola in weight.

(2) Bhadrlok, jotedar, etc. (idle person of the middle class), who can afford to pay, and who have no occupations, smoke once in the morning, once after breakfast before their afternoon sleep, and once at night. They smoke quarter tola in weight, price four pice, in sadar, and quarter tola in weight, price six pice, in the mufassal.

(3) *Labouring classes*.—Cultivators, especially during the rainy season, while working in water. In the morning before commencing work and when they feel tired they smoke. After breakfast once, and once at night before going to bed. Thus they smoke five or six times in twenty-four hours. They smoke in small quantities—two to two and a half annas (sixteen annas making a tola) in weight, on an average worth three pice.

(b) *Habitual excessive consumers*.—They do not smoke tobacco, but smoke ganja whenever they feel a craving for smoking. They generally smoke a tola of ganja in weight per day, price four to five annas.

Well-to-do people, who consume ganja in large quantities, powder the ganja in a pestle and mortar, and then put the powdered ganja in the chillum over prepared tobacco.

Average allowance of (per diem)—

Ganja.	Bhang.	Charas.
(a) <i>Habitual moderate consumers</i> .		
Dacca— $1\frac{1}{2}$ to 1 anna in weight, cost $2\frac{1}{2}$ pies to $4\frac{1}{2}$ pies.	4 annas in weight, cost $1\frac{1}{2}$ pies.	$\frac{1}{2}$ anna, cost 3 pies.
Mymensingh—1 or 2 annas in weight, cost 6 pies at sadar and 9 pies in the mufassal.	4 annas in weight, cost 3 pies.	1 anna in weight, cost 2 annas.
24-Parganas—2 to 3 annas in weight, cost 12 or 15 pies.	8 annas in weight, cost 3 pies.	1 anna in weight, cost 2 annas.
(b) <i>Habitual excessive consumers</i> .		
Dacca—2 annas to 8 annas in weight, cost $8\frac{1}{2}$ pies to 1 anna 5 pies.	1 tola in weight, cost 6 pies.	1 tola, 8 annas.
Mymensingh—1 tola in weight, cost 4 or 5 annas.	2 tolas in weight, cost 1 anna.	1 tola, 8 annas.
24-Parganas—1 tola in weight, cost 4 or 5 annas.	2 tolas in weight, cost 1 anna.	1 tola, 8 annas.

In Dacca and Mymensingh wild bhang is used, and it is therefore an inexpensive luxury.

On account of increase in duty and license fees the consumption of ganja has greatly fallen off. Poor people cannot now pay for the full quantity they require.

29. Ganja—

Ordinary—Ganja is covered with dry tobacco leaf before cutting, and a small quantity of tobacco is put in the

chillum on which prepared and cut ganja is put; over it charcoal fire is put. Sanyasis do not cover with tobacco leaves. When tobacco leaf is not available, the ganja is mixed with prepared tobacco. Ganja is sold by itself. People taking it make their own preparations.

Exceptional—

(1) The excessive consumers sometimes mix powdered dhatura seeds or dhatura

leaves with the ganja before smoking for greater intoxication. But this is rarely done by sanyasis. Rich people add rose-water and attar for fragrance.

- (2) Those who are unable to pay for their adequate dose cut *supari* (betelnut) in very small pieces and mix with ganja. It is then washed and cut, pressed and smoked, as in the case of ganja.
- (3) Ada (ginger) is cut in small pieces, and is then mixed with ganja, and then rubbed, cut, and prepared like ganja, and then smoked in chillum. This form is supposed to be a preventive against cough and bronchitis.
- (4) Ganja and charas are mixed together, and smoked as ganja to produce greater intoxication.
- (5) Ganja and opium are mixed (each three pie worth) and smoked as ganja to produce greater intoxication.
- (6) Ganja and bhang are mixed together and eaten by poor men, who cannot pay for the high price of ganja for their adequate dose.
- (7) Young mango leaves and ganja are mixed and pressed together and smoked. It is said to produce greater intoxication.
- (8) Dadhi (curdled milk), attar, rose-flower and powdered dhatura seeds are also mixed with ganja and then smoked.
- (9) Ganja is immersed in dadhi (curdled milk) and smoked.
- (10) Ganja and ghi (clarified butter) are chewed, and swallowed by sanyasis. Gurjat ganja is drunk by the pandas at Puri, Bhubaneswar, and Satyabadi.
- (11) White sandal wood is sometimes cut in very small pieces and mixed with ganja for imparting to it a good fragrance.

Bhang, ordinary—

- (1) Salt is mixed with Jal bhang—simple bhang drink, where milk is not added.
- (2) Black pepper, cucumber seed, melon seed, sugar, milk, dhanias, kabab chini, and aniseed are generally mixed with bhang when used for drinking. Milk and sugar are mixed to improve taste and to help digestion. In some preparations attar and rose-water and cocoanut water are added to produce greater intoxication and for refinement, luxury, and pleasure in eating and drinking.

Exceptional—

- (1) Dhatura seed powder is mixed with the bhang to produce greater intoxication.
- (2) Ganja seed is mixed with the bhang for greater intoxication.

Charas—

No ingredients are exceptionally mixed with charas. Prepared tobacco is ordinarily mixed with charas.

Dhatura is sometimes so used.

The object of these admixtures is to produce greater intoxication.

Bhang massala is sold for the purpose of being mixed with bhang. (I have got sample packets.) It is sold at Dacca and Calcutta in packets at one pie each. The ingredients of the bhang massala are :—

Sold in Calcutta and the Dacca District.

- (1) Kira bichi, seeds of the cucumber. (2) Kakri bichi, seeds of kakri or melon. (3) Kahu (seeds of salad). (4) Kagji lemon. (5) Gakhuru kata or like kanti kari. (6) Sounf, aniseed. (7) Black pepper. (8) Poppy-seed. (9) Rose.

Up-country people use the following ingredients with bhang in drinking :—

- (1) Buds of roses. (2) Melon seeds. (3) Kasni, a demulcent and soothing flower. (4) Seeds of the cucumber. (5) Almond (for increasing fat). (6) Aniseed. (7) Black pepper. (8) Kahu. (9) Leaves of the bel fruit for enhancing retentive power. (10) Asafetida and curdled milk. The asafetida is boiled and its smoke is passed into dadhi (curdled milk) or ghole (skimmed sour milk). The bhang is mixed with this dadhi or ghole. It increases appetite, and is considered soothing.

30. Ganja.—Not like madak or chandu, but consumers prefer smoking in company of one or two persons in villages. Ganja-consumption is generally confined to the male sex as well as to old females of the lower classes—Bedias, prostitutes, baishuavis, old fish-women, chandal women, etc.

Extent of consumption in solitude 20 per cent. (at night before going to bed generally consumed in solitude). Low class poor people and well-to-do people (habitual moderate consumers) smoke in solitude.

Extent of consumption in company, 80 per cent. In towns ganja is consumed in company generally by the male sex, and by young men of twenty to twenty-two. They commence smoking when they are between twenty to thirty, and they cannot give up their habit; on the contrary, they have to increase their dose. As in other intoxicants it commences with the young people, and increases with age if they can afford to pay for it. In old age it decreases. Habitual consumption is generally steady, and does not increase to a great extent.

Bhang.—Consumed daily in solitude and on festive occasions; it is drunk in company. It is confined to male sex generally. Few women drink bhang. There is no fixed time of life. People learn to drink generally from twenty-five to thirty. The quantity increases with age.

Charas is not smoked in solitude, but is smoked in company. The consumption is confined to the male sex and prostitutes.

It is not usual for children to consume ganja, bhang or charas.

Exceptions—

- (1) Abdul, an orphan, and one of the shop boys in the Nasirabad ganja shop, commenced smoking ganja at the age of eight or nine, and is now eighteen or nineteen. He can smoke a large

quantity of ganja, and can stand its effect. He is of robust constitution, healthy, of good temper, of lively spirits, can work very hard, is willing and obedient, and is always cheerful.

- (2) Among lower classes and among jatra-walas (music party) children of eight or ten years sometimes learn to smoke from their fathers and elders, who themselves smoke ganja. The father smokes the ganja, and the child gives one or two pulls when the chillum is kept aside. Among lower classes (mistri, carpenter, coolie, etc.), father, son, and grandson smoke tobacco together. Children learn to smoke tobacco when very young. Chandra Nath Mistri of Akna, near Nasirabad, smokes ganja with his sons.

31. (a) The habit of consuming ganja, bhang, and charas is easily formed as with other intoxicants.

(b) It is difficult for habitual consumers to break off the habit. I have seen people sent to jail break off the habit after a restraint for some time. It is very difficult to break off the habit of smoking ganja and charas, but it is easy to break off the habit of drinking bhang.

(c) There is no tendency for the moderate habit to develop into the excessive, but it may, as in other intoxicants, even in tobacco.

But poor people cannot afford to pay for the high price, and they cannot, therefore, become excessive smokers. Even people who can afford do not smoke excessively for fear of being looked down.

32. *Bhang consumption. Social custom*—(1) Bhang drinking forms part of the social custom on festive occasions like the last day of the Durga Puja (Bijoya Dasami) after the idols are thrown into water (*vide* answer to question 27 (c)).

The bhang is smashed with black pepper and spices, and then mixed with milk, sugar, and water or cocoanut water, and given to every member of the household by the mistress of the house. It is also offered to every person who comes to pay respects or to meet the members of the house. It is drunk just as "drinking health" in European society. In Central and Northern Bengal it is customary for the Hindus to see their friends and relatives, and embrace them after the Bijoya Dasami. After this ceremony is over, it is incumbent on the owner of the house to offer to his visitors a cup of bhang and sweetmeats as tiffin.

(2) In Mymensingh and in the eastern districts similar preparation of bhang is drunk on the Maha Navami (third day of the Durga Puja), Lakshmi Puja and Sri Panchami Puja. The wild bhang is smashed and boluses are formed. They are mixed with milk, sugar, cocoanut-water, and offered to god Siva on the Navami Puja, Lakshmi Puja, etc. It is then distributed for drinking.

(3) In the Dacca District everyone (young and old) drinks bhang before the image of the goddess Durga on the Navami Puja day. The priest pours the liquid into the mouth of every one present.

Religious.—1.—Green bhang leaves are fried in ghi and offered to goddess Saraswati (goddess of learning).

II.—The green leaves are boiled in milk and cocoanut pulp and sugar is mixed, and when they assume a consistent form, *laddu* is formed. It is also offered to goddess Saraswati, and afterwards eaten.

III.—Bhang *laddu* is invariably offered to god Siva during Sivaratri, and then eaten in the districts of Jessore, Khulna, and Backergunge. The *laddu* is composed of wild bhang, cocoanut pulp, and gur (cane or date molasses) or sugar.

IV.—To concentrated milk smashed green leaves of the bhang plant are added. They are made into small balls and offered to goddess Saraswati. They are then eaten.

V.—*Madan khir* is given to every guest or friend who comes to the house on the occasion of Sri Panchami. It is offered by the bhadralok to goddess Saraswati. It consists of smashed wild bhang, condensed milk, sugar, etc. It is eaten in the Dacca District, and specially at Dhamrai, near Sabhar, noted for its car festival.

VI.—*Kamdeb Puja* or *Madan Chaturdashi Brata* (puja in honour of Cupid god). On the Sukla Chaturdashi of the month of Chaitra or Baishak, Madan, Kamdeb or Cupid, is worshipped in East Bengal. A bedi (raised earthen platform) is made in the centre of the outer yard, and plantain trees are planted at the four corners of the platform. Rice powder, gur (cane sugar), and bhang leaves collected fresh are pounded together in a dhenki. They are offered to Kamdeb at mid-day, and incantations are offered. A handful of this powder and sweets (generally batasa) are distributed to each of the villagers in the afternoon (before evening). The puja is performed by every talukdar and respectable high caste people in villages in the Manikgunge Sub-division. Villagers, specially the lower classes, go to the fields adjoining the village and sing songs in praise of Madan (Cupid) in the evening. The songs are generally obscene.

VII.—*Satabari* is sold in the Dacca District on the Bijoya Dasami day, when the idols are thrown into the river. It is sold to spectators and others who go to see the *bhasan*. The balls are composed of rice powder, bhang, and gur.

VIII.—*Gorakhanath* (Siva, the protector of cows) is worshiped on the occasion of the delivery of a cow. On the 21st day after the delivery, the cow is milched, and the milk is boiled and concentrated. It is then mixed with smashed bhang leaves, and *laddu* is formed and offered to god Gorakhanath. Incantations (mantras) are uttered for about two hours, and the rakhals (cow-keeper boys) response by saying "Heccho." After the puja the balls are distributed to the boys with sweets, etc. The puja is made before the cowshed. *Laddu* is distributed to every person present. This is done in many Hindu households in East Bengal. The *laddu* is known as *Gorkhar laddu*.

The offering of bhang on the occasion of Durga Puja, Lakshmi Puja, Saraswati Puja, and Gorakhanath Puja forms an essential part of the religious ceremonies. The use is temperate. It does not lead to formation of the habit. Bhang-drinkers are not socially looked down upon.

Ganja. Social.—(1) There is no social custom among the bhadralok. The ganja-smokers are looked down upon by the gentry.

(2) At Lakhipur, Nangalband, and other places in the Narayangunge Sub-division of the Dacca

District a mela is held; it is known as Nangal-band Astami Snan mela. People bathe in the Brahmaputra river on that day. Bairagis and Sanyasis meet and people offer them ganja to do them honour and to have benedictions pronounced upon them.

(3) Among the bairagis in Baul mela and mahatsub, the bairagis are received with chillums full of ganja.

(4) People visiting Akras (monasteries of Baishnavas) are given ganja for smoking. For concentration of thought sanyasis and bairagis smoke ganja. It is said thoughts are directed strongly to one direction.

Religious.—(1) In invoking Mahadeb, ganja is offered to the god. Ganja is offered to god Siva on the occasion of Sivaratri at Tarakeswar. It is popularly believed that it pleases the god Siva more than anything else. Ganja is considered to represent the locks of hair of the god of gods—Siva.

(2) People, especially females, sometimes offer ganja to sanyasis to please them, and in order to have benedictions pronounced by them regarding fulfilment of desires. When a dear relative is suffering from a serious malady, it is sometimes offered to sanyasis for his recovery.

(3) *Trinath Puja.*—The puja is observed at all times and in all seasons by both Hindus and Muhammadans (who call it "Tin lakh Pir"). When an object specially desired is fulfilled, or when a person suffering from a serious illness recovers, and on occasions of marriage and other ceremonies, and at the birth of a son, Trinath is worshipped. Ganja forms an essential part of the puja. Originally one pice worth ganja, one pice worth oil, and one pice worth betelnuts were required for the puja. But now 3, 5, 7, 9, 101, 108 pice worth of ganja is offered to god Trinath, and they are filled in 3 to 108 chillums and smoked. Generally three pice worth of ganja is offered. Three new chillums are filled and offered to god Trinath. Then a lamp is lighted, and a book containing the praise and describing the exploits of Trinath is read (I have got the book with me). Fire is put on the chillums of ganja and kept for some time. The first chillum is taken by the priest, who pulls first and passes it on to the next man; who after pulling passes it on to the next man, and so on. The second and third chillums are gradually taken and treated in the same manner.

Pan, betelnut, and sweets are also offered to the god, and they are afterwards distributed among the persons present. All the persons present must each take the chillum, and bow to it. Those who are accustomed to ganja smoking give a hard pull; those that are unaccustomed to its use hold the chillum and give a gentle pull, and pass it on to the next man. The ganja smoking is confined to the male sex; sometimes old Baishnavis attend the ceremony, and they smoke the ganja. When the reading of the book is finished, the sweets are distributed. As long as the light burns, no one leaves the place of worship. These are called "Manasik Puja," or puja for fulfilment of desires.

(b) Ganja offering and smoking forms an essential part of the puja ceremony.

(c) It is temperate.

(d) Quite possible. But generally those that smoke attend the puja ceremony. It is therefore not likely to lead to injurious results.

Charas.—There is no social or religious custom in regard to the consumption of charas.

33. *Ganja.*—The consumption of ganja is not very favourably regarded by the people, and in the case of excessive consumers it almost amounts to contempt. They are generally called "ganja khor" or "bhang khor" for the fact of their being of a hot temper. No custom of worshipping the hemp plant obtains in the Dacca and Mymensingh Districts.

Social feeling.—Ganja-smokers are looked down upon by the educated people; but in the case of sanyasis, bairagis, and on religious ceremonies it not so regarded. The uneducated people have little sentiment against ganja-smokers. On the other hand, they have great respect for sanyasis, bairagis, and ramaits. Those that can smoke a larger quantity of ganja are more respected. They are considered chosen men of god, possessing supernatural powers of healing, soothsaying, etc. Rich and influential people smoking ganja are not looked down upon.

Religious feeling.—(1) Sanyasis, mahantas, and religious preceptors (mantra-data gurus) are respected. The feeling is strong in their favour. Ganja is offered to sanyasis even by respectable people. When the sanyasi accepts the offer and smokes, people consider it as if they are performing a pious act.

(2) In Trinath Mela and Siva Chaturdashi at Tarakeswar respectable Hindus offer ganja to the god Siva. There is no public feeling against the use of ganja in religious ceremonies.

Educated people and people of the higher and middle classes in this country treat the ganja-smokers with feelings of disrespect, and call them "ganja khor," "bhang," "ganjari," etc., because it is popularly believed that ganja-smokers exaggerate a thing ("ganja khuri katha"), and people do not put much reliance on their statements. The educated people consider them worthless, and look down upon them because they smoke a cheap intoxicant, and because generally poor people smoke it. The well-to-do bhadralok consider it an intoxicant for the poor and illiterate men. Bhadrakok smoking with poor, low class people are considered degraded.

Ganja is the poor man's narcotic. He won't work without ganja when he feels a craving for it. He becomes idle and obstinate without ganja. The bhadralok employers sometimes suffer on account of their obstinacy, and they are therefore disgusted with their employes.

Bhang.—(1) Bhang is not looked down upon. No opinion against bhang-drinking. There is public opinion in favour of bhang. It is used by almost every Hindu on the Bijoya Dasami, Durga, Lakshmi, and Saraswati Pujas. The public opinion is not against the use of bhang on social and religious occasions. All Hindu ganja-smokers and bhang-drinkers dedicate the ganja or bhang to god Siva—"Bom Siva"—before smoking or drinking.

(2) On the Chaitra Sankranti day (on the last day of the Bengali year) in Dacca and Mymensingh some green bhang plants are hung up in front of the cowshed. Bhang plants are also kept on *machans* in the cowshed. It is popularly believed that it purifies the atmosphere of the cowshed, and gives health and strength to the cattle.

I have not seen a bhang plant worshipped. I am told that ganja or bhang plants are worshipped by some people as Mahadeber jata (cluster of hair of the god of gods), and that bhang plants are worshipped in Tipperah.

Charas.—There is no public opinion against charas. Its consumption is limited to a small class, generally well-to-do.

34. It would be a serious privation to the habitual moderate and habitual excessive consumers and poorer classes of consumers (especially cultivators, day-labourers, fishermen, boatmen, etc.) to forego the use of ganja or bhang.

With the cultivating classes, who use it in moderate doses, it would be impossible to work in the fields in the rainy season, in damp climate, and in the sun. The ganja-smoker will feel it deeply. He would suffer from indigestion, dysentery, distension of the abdomen, loss of appetite, want of sleep, headache, weakness, loss of energy, constipation, and rheumatism.

Blacksmiths working near a furnace (before a strong fire) cannot work without ganja. A ganja-smoker willingly accomplishes a very difficult task if he gets a small quantity of ganja. Labouring classes, who use the drug as a matter of necessity, will be deprived of a very good remedy for relieving bodily pain after hard labour; for instance, in the case of fishermen, who from the nature of their profession are required to remain for the most part of the day and night in water, smoke ganja occasionally to secure warmth and fresh vigour to enable them to continue their hard labour.

The labouring classes will not be able to carry on their work, involving hard labour, fatigue, and exposure to sun, rain, and fire. They would suffer from rheumatism and become idle.

The sanyasis and bairagis would suffer much in general health, and it is alleged that absence of ganja would greatly interfere with their concentration of thought.

Ganja is smoked in private, and it is difficult to give the number of the consumers.

The probable percentage of consumers is given in answer to question 26.

Poor day-labourers, cultivators, fishermen and other habitual moderate and excessive consumers will be driven to the necessity of using other intoxicants more expensive and harmful to their health.

35. It would not be feasible to prohibit the use of ganja or bhang.

The drug would be consumed illicitly, and people would cultivate ganja in their houses.

Impossible for wild bhang. The prohibition could be enforced if the ganja cultivation is stopped, and if stringent law is made binding the

proprietors and managers of estates not to allow cultivation of the drug (ganja or bhang) on pain of some penalty, and by making section 65 of the Excise Act (page 89 of the Bengal Excise Manual) more stringent. But it will create serious discontent, not only among consumers, but among the proprietors of estates, on whom the liability to furnish information to the authorities would be imposed as above.

The prohibition will occasion serious discontent among the consumers. Their feelings are very strong on this point. They will curse the Government, and will assault Excise and Police officers.

Such discontent may amount to a political danger. The sanyasis are respected by all classes of the people, and they may preach sedition. People will consider it an interference with their religious ceremonies. The people in general are contented, and their feeling will be wounded too much. The ganja-smokers may assault Excise and Police officers because the number of consumers is very large, and people may combine, and it would be difficult to procure evidence.

I have heard sadhus and sanyasis complain bitterly on account of increase in the retail selling price of ganja due to increase of duty and license fees. The sanyasis say that the mind cannot be made steady and diverted to the contemplation of the deity without ganja, and that it is a niggardly act on the part of the Government to impose tax on an article (ganja) which is used by sadhus (religious men) for religious purposes. Holy sentiments are associated with ganja-smoking.

The prohibition of ganja would be followed by recourse to other stimulants:—

- (a) Some bhadralok and well-to-do people, who can pay for the more expensive luxury of drink, may have recourse to alcoholic stimulants. But poor people smoke ganja, and they cannot afford to pay for alcoholic stimulants. Many people do not touch liquor on account of religious prejudice.
- (b) Some will have recourse to opium and some to dhatura seed, but the majority will smoke wild bhang (Siva jata bhang). It is impossible to extirpate them.

Restrictions may be imposed on duty-paid ganja and bhang. But it is impossible to impose any restriction on wild bhang.

36. There is no reason for thinking that alcohol is now being to a certain extent substituted by the masses for ganja, bhang, or charas. On the contrary, people have taken to drinking bhang and smoking ganja on account of increase in the retail selling price of distillery liquor (a bottle of liquor is sold at not less than Re. 1 in any of the distillery districts). Ganja is now smoked by the poor people as a substitute for liquor. Some people smoke ganja to intensify the intoxication caused by alcohol. They call it "double chabuk;" it gives extra intoxicating impetus.

37. The effects of charas-smoking are slightly different from the effects of ganja-smoking.

The effects of ganja-smoking in those unused to the drug, unless the smoke is inhaled, appear to be slight; when inhaled, however, by those who

are unaccustomed to it, it produces a dizzy intoxication. In the case of those accustomed to its use, it produces a marked suffusion of the conjunctiva.

Ganja.—Becomes cheerful, can work hard and perform difficult work. Becomes more energetic. Loses the sensation of external heat. Does not feel any inconvenience in working in the sun, before fire, and in rain. The effect lasts for two or three hours.

Charas.—It produces suffusion of the conjunctiva in some. It is the rich people's intoxicant. Can talk and sing. Becomes cheerful, but shows no activity or inclination for work. The eyes become dull and reddish to a certain extent resembling the effect of opium. The effect lasts for fifteen minutes or half an hour.

38. There is no difference in effect, in kind, or degree on consumers of the three different preparations of ganja. But in particular districts particular kinds are preferred. Ganja contains less leaves and seeds, and more resin; ganja—the flowery portion of which is more healthy and thick, is preferred. Its intoxicating power is more than that of less developed flowers. The object of ganja-smoking is clearly expressed by the following lines:—

The Jogi smokes for the concentration of thought necessary for joge, and for pronouncing the name of Hari (god).

The Rajput smokes for becoming strong, and for extracting the tusks of elephants with the hand.

The merry smokes for becoming cheerful, and for pleasing women.

The hungry smokes for intensifying his hunger, and for eating up a *handi*-full of boiled rice.

39. Ganja and charas are generally used for smoking, and bhang is used generally for drinking as a decoction.

<i>Ganja</i>	{	Smoking—More injurious than eating or drinking, which is rare.
		Drinking—Less injurious than smoking.
		Eating—Less injurious than smoking.

The immediate action of smoking is on the brain and the nerves. The smoker sits motionless for a few seconds. Its effect is temporary; it lasts for two to three hours, and is therefore called "Turitananda."

In eating or drinking its action is slow, and on the whole system, and the effect lasts for eight to ten hours.

<i>Bhang</i>	{	Smoking—Very rare and not injurious.
		Drinking } Not injurious as compared to ganja-smoking or drinking.
		Eating }

Bhang is rarely and to a small extent used for smoking. The effect lasts for half an hour.

Bhang-drinking.—After one or two hours its action on the system is felt, and the effect lasts for six to eight hours, sometimes more. It acts on the whole system.

Charas.—Charas is only used for smoking; it is not used for eating or drinking.

Ganja-smokers require nourishing food; those that cannot afford to pay for good diet suffer in health, as in the case of other intoxicants. Milk, gur, and teatul (tamarind) are beneficial to the ganja-smokers. There is an old saying in East Bengal that the drinking of bhang is as beneficial to health as the eating of gold "Sonar Gun Bhang Kora."

40. Ganja and bhang are prescribed on account of their medicinal properties by native doctors in the affections of the urinary organs, nervous diseases, dyspepsia, diarrhoea, asthma, hysteria, gonorrhoea (second stage), hysteria, and it is a household medicine for scabies.

Ganja—

- (1) In scabies ganja is fried in mustard oil, and the oil is applied to the sores. Healing oil for ulcers is generally prepared from ganja in every household.
- (2) In asthma ganja is smoked.
- (3) In cases of neuralgia, rheumatism, and gout, oil prepared with ganja (mustard oil and ganja) is used with much benefit.

Bhang—

- (1) In bowel-complaints and in strengthening and invigorating the system.
- (2) In Mymensingh, where there are no karbirajes, wild bhang is used as a medicine for cholera by the people themselves. It is smashed and made into boluses. No other ingredients are mixed with it. A bolus of bhang weighs one to one and a half tolas.
- (3) To allay pain in the chest, sides, and also in hemorrhoids (piles), bhang leaves are put inside a cloth and warmed in slow fire, and used for dry fomentation.
- (4) In the Dacca District people drink bhang as a preventive in the cholera season, or when cases of cholera appear. Bhang is smashed with water collected by washing atabehaul (rice).

The *Cannabis sativa* (Sanskrit Bijaya or Indrasan—food of Indra—bhang, ganja) has been in use from a very remote period, both as a medicine and as an intoxicating agent in India. A mythological origin has been ascribed to it. It is said to have been produced in the shape of nectar while the gods were churning the ocean with the mountain called Mandara. It is the favourite drink of Indra, the king of gods, and is called Bijaya, because it gives success to its votaries. The gods through compassion on the human race, sent it to this earth, so that mankind by using it habitually may attain delight, lose all fear, and have their sexual desires excited.

The leaves of the *Cannabis sativa* are purified by being boiled in milk before use. They are regarded as heating, digestive, astringent, and narcotic. The intoxication produced by bhang is said to be of a pleasant description, and to promote talkativeness. In sleeplessness, the powder of the dried leaves is given in suitable doses for inducing sleep and removing pain (*vide* Darpana).

Jati phaladya churna.—Take of nutmeg, cloves, cinnamon, cardamom, tejapatra leaves, flowers of naga kesara (*Mesua ferrea*), camphor, sandalwood, sesamum seeds, bamboo manna, flowers of tagora (*Taberna montana coronaria*), chebulic and emblic myrobalans, long pepper, black pepper, ginger, leaves of talisa (*Pinus webbiana*, plumbago root), cummin seeds, and the seeds of viranga (*Embelia Ribes*), equal parts, purified bhang equal in weight to all the above ingredients, and sugar twice as much as the bhang. Powder and mix. Dose about 20 to 40 grains. This preparation is given in diarrhoea, indigestion, and loss of appetite (*vide Saranga Dhara*).

Jvalanala Rasa.—Take of *Yavakshara* and *Sarjikakshara* (impure carbonates of potash and soda), borax, mercury, sulphur, long pepper, black pepper, piper chaba (*Chavya*) and ginger equal parts, fried leaves of bhang equal to all the above ingredients, root of *Moringa pterygosperma* half the weight of bhang; powder the ingredients, mix and soak the mixed powder for three days in each of the following fluids, namely, a decoction of fresh juice of the leaves of *Cannabis indica*, the roots of *Moringa pterygosperma* and *plumbago rosea*, and dry in the sun. Then roast the mass lightly, and make into a pill mass with the juice of the leaves of *Wedelia Calendulacea* (*Bhringa Raja*). Dose, about half a dram with honey. This medicine is given in indigestion and loss of appetite with nausea and vomiting (*vide Bhaba Prakas*).

Numerous confections of bhang, such as *kamesvara modaka*, *madana modaka*, *balyasakrasana modaka*, etc., are described in Sanskrit medical works. These, as their names imply, are considered aphrodisiac, and are used in chronic bowel complaints and nervous debility. Most of them are prepared with equal parts of a number of supposed tonic and aphrodisiac substances in small quantities, and bhang equal in weight to all the other ingredients, together with sugar, honey, and the usual aromatics.

Madana Modaka—

Take of the three myrobalans, ginger, long pepper, black pepper, *Rhus succedanea* (Sringi), *Pachak* root, coriander, rock salt, zedoary root, leaves of *Pinus webbiana* (talisa), bark of *Myrica sapida* (katphala), flowers of *Mesua ferrea* (Naga kesara), ajowan, seeds of *Seseli Indicum* (vana ya mani), liquorice root, seeds of *Trigonella faenum-græcum* (methi), cumin and nigella seeds, equal parts; bhang leaves with flowers and seeds fried in clarified butter, equal in weight to all the other ingredients; sugar equal in weight to the bhang. Prepare a syrup with the sugar, then add the other substances in fine powder, and make into a confection. Lastly, add clarified butter, honey, powdered sesamum seeds, cardamoms, cinnamon, tejapatra leaves, and camphor, each two tolas, and make into boluses of about 80 grains each. This confection is used in cough, chronic bowel-complaints, and impotence (*vide Sara Kaumudi*).

Ganja and charas are not used as medicine in cattle diseases Wild bhang is so used—

- (1) The smashed bhang is given to cows in the form of balls in cases of diarrhoea and dysentery.
- (2) Green or dry bhang is mixed with molasses or gur, and is given to horses in the cold season. The appetite and general health improves and the animal fattens.

41. Ganja—

The moderate use of ganja or bhang is beneficial in its effects.

Ganja—

	Per cent.	
(a) Bhadrakok	5	(a) Ganja both accessory and digestive, save in cases in which the habit is contracted in company.
(b) Cultivators, boatmen, coolies, mali, mistri, fishermen, blacksmiths and other labouring classes whose occupation compels them to work in the sun, water, rain, or before strong fire	.50	(b) Yes; ganja smoker does not feel hunger after smoking ganja. Labouring and poorer classes can work for a long time without any food after smoking ganja.
(c) Cultivators, fishermen, etc., who work in malarial and unhealthy damp watery places	.60	(c) Yes; as a preventive against malaria, rheumatism, etc.
Bhadrakok	.5	(d) For religious purposes, as in Trinath Puja, etc.
(d) Religious by sanyasis, etc.	.70	
Bhadrakok	.5	
Bhang—		
(a) Bhadrakok	.30	(a) Yes. Increases appetite, and improves the health and the digestive power.
High caste up-country people	.50	(b) Yes; can stand fatigue. Brahmin cooks can prepare and distribute food the whole day, and can work very hard after drinking bhang.
(b) Cultivators, cooks, labouring classes, etc.	.40	(c) In cholera seasons bhang is drunk in small quantities as a preventive against cholera.
(c) Bhadrakok and by all classes	.50	(d) It is used as an aphrodisiac and in religious and social ceremonies, and as a medicine, etc.
(d) Bhadrakok and by all classes	.40	

Charas is used by a very limited class of consumers for intoxicating purposes.

I refer to moderate habitual consumers of the drug.

42. The moderate use of ganja and bhang is beneficial, and it is harmless too. Veteran ganja smokers can live up to the ripe old age of 80 years, and they do not complain of its harmful effects.

I have seen boatmen and others who smoke ganja and bhadrakok who drink bhang habitually can endure any amount of fatigue and exposure, can eat food with good appetite, can sleep soundly, and work hard and cheerfully. They also keep good health. Many people who had suffered from dyspepsia have been cured of the disease by the moderate and habitual use of bhang. Those who smoke in excess become irritable.

43. Yes; the moderate consumers are inoffensive to their neighbours.

44. Immediate effect of ganja.—The smoker becomes cheerful, strong, resolute, and refreshed; shakes off lethargy, and willingly commences work with zeal. The eyes become blood-shot and dilated. He can work without fatigue. Cooks can cook food the whole day near strong fire after smoking ganja in the hottest part of summer without fatigue:

Bhang—

No immediate effect. After half an hour or an hour its effects are felt.

Charas—

The action is immediate, the eyes become congested and the consumer feels cheerful. He becomes talkative.

Ganja, bhang, and charas are refreshing.

Ganja and bhang allay hunger. The consumers do not feel hunger for a time.

Ganja and bhang create appetite.

The effect of ganja lasts for two to three hours.

The effect of bhang lasts for eight to ten hours.

The effect of charas lasts for fifteen minutes to one hour.

After-effects. Ganja.—Yes; becomes dull and feels no inclination for work; no headache. There is longing and uneasiness. The effects are slight on moderate habitual consumers.

Bhang.—Yes; becomes dull and drowsy. After bath feels better.

Charas.—No after-effect.

For habitual moderate consumers the want of subsequent gratification does produce little or no longing or uneasiness.

45. The habitual moderate use of ganja does not produce any noxious effects.

Physical.—They keep good health, can work hard, and can undertake all sorts of fatigue and exposure. Can work in the sun without umbrella. They feel ease and comfort, and can sleep soundly and eat with great relish.

Mental.—Forget all sorrow, become cheerful, talk and sing, and show mental activity.

Moral.—None.

The constitution is not impaired in any way if healthy food, milk, dadhi, ghi, etc., are taken.

It does not impair the digestion or cause loss of appetite. When nutritious food is not taken, it produces diarrhoea, dysentery, etc. They are sometimes found to suffer from cold and cough.

It does not impair moral sense, etc.

Bhadralok degenerate by mixing with low class people. It does not induce laziness. Without ganja he becomes dull, and on smoking ganja becomes cheerful and active.

It does not induce habits of immorality like wine. It does not induce debauchery like wine. Ganja is considered an aphrodisiac.

Habitual moderate use does not deaden the intellect or produce insanity. It is difficult to say whether ganja smoking is due to insanity or insanity is due to ganja smoking.

Insane persons smoke ganja. When they were sane, they did not use ganja. It sharpens the intellect. Insane persons become irritable when they do not get ganja, but after smoking ganja become sober. I examined two mad men at Nasirabad and Kissoregunge in Mymensingh. They were creating *golmal* near the ganja shop and were demanding ganja.

- | | | |
|------------------|---|--|
| Madman
No. 1. | { | Q. Has ganja smoking made you insane? |
| | | A. Sir, Ganja smoking does not produce insanity, without ganja one becomes mad. |
| | | Let me have little ganja, I shall keep quiet. |
| Madman
No. 2. | { | A. Without ganja I am getting mad, let me have little ganja and I shall become sane. |

As soon as a little ganja was given them for smoking they became quiet and did not talk.

46. Excessive.

Physical.—Weak.

Mental.—Becomes irritable and free from worldly cares.

Moral.—Indifferent.

47. Habitual moderate use of bhang, ganja or charas does not appear to be a hereditary habit, or to affect in any way the children of the moderate consumers.

A very few children of the lower classes learn to use the drug from their fathers. Most of them imbibe the habit when they attain the age of twenty or twenty-two. The use of the hemp drugs does not appear to be a hereditary habit.

48. Habitual excessive use of bhang, ganja or charas does not appear to be a hereditary habit, or to affect in any way the children of the excessive consumers.

Ganja. Bhang. Charas.

49. *As an aphrodisiac*— Yes. Yes. Yes.

(Ganja is used largely for the purpose; it is common to all intoxicating substance. Hemp drugs are cheap and the poor man's narcotic.)

Use by prostitutes— Yes. No. Yes.

(It is so used by the poorer classes of prostitutes in East Bengal; it is said that they can carry on their abominable and degraded profession with several persons without fatigue or weakness.)

Its use for this purpose— Not in- Not in- Not in-
jurious. jurious. jurious.

(In moderate dose): The use of hemp plant does not tend to produce impotence.

50. *As an aphrodisiac*— No. No. No.

Use by prostitutes— No. No. No.

(Sanyasis and bairagis smoke ganja to check animal passions and for concentration of thoughts to a fixed purpose. After a continued smoking for several years they lose all carnal appetite and their senses are deadened.

Its use for this purpose— It is not used for this purpose.

(In excessive dose): The senses are deadened, but it is difficult to say whether the excessive use produces impotence.

51. [I examined Mr. Gopal Hari Mullick, District Superintendent of Police (service twenty-nine years), and several Inspectors of Police (service twenty to thirty years).]

(a) Any large proportion of bad characters are not habitual moderate consumers of any of these drugs.

(b) The moderate use has no connection with crime in general or with crime of any special character.

52. Any large proportion of bad characters are not habitual excessive consumers of any of these drugs. The excessive use of the drug has no connection with crime in general or with crime of any special character.

53. Excessive indulgence in ganja and bhang may incite to unpremeditated crime, violence or otherwise.

I do not know of any case in which it has led to temporary homicidal frenzy.

Mr. Gopal Hari Mullick (District Superintendent of Police) was examined, and he cited two cases in which violent crime was committed on sudden impulse by habitual excessive ganja-smokers. The excessive ganja smokers do not listen to friendly advice.

(1) One of the adopted sons of the Rai-chaudhory family of Nowpara in Jessore used to smoke ganja in excess. Babu Debendra Nath Rai Chowdhory, his uncle, a respectable zamindar, used to remonstrate with him for his smoking ganja, and there was an altercation. One evening in 1887 the young man attacked his uncle with a sword and hacked him to pieces. The murderer was sentenced to transportation for life.

(2) Brother of the late Babu Gopal Chandra Sen, Deputy Magistrate of Burdwan, used to consume ganja in excess. One morning his child (a baby) was crying, and he at once took hold of a hatchet, and with a single stroke severed the head of the child from its body. The man was acquitted by the Judge on the ground of temporary insanity.

54. These drugs are not generally used by criminals to fortify themselves to commit a premeditated act of violence or other crime. But alcoholic stimulants are so used. Those who are in the habit of smoking ganja generally smoke it before engaging in any work; not generally for committing a crime. Those that smoke ganja or drink liquor, and who are habitual criminals, or who have by nature a tendency to commit a crime, do so.

55. Criminals, in order to further their design, rarely induce their victims to consume ganja, bhang or charas, and so stupefy them. Ganja and charas are not so used. Bhang is rarely used as drink or in the form of majum given without the knowledge of the victim. In old days Thagis used to do it. I know of cases in which dhatura and strychnine were mixed with liquor to stupefy prostitutes in order to kill them or to rob them of their ornaments.

Complete stupefaction cannot be induced by bhang alone without admixture with dhatura seeds. If taken in a very large dose by a novice, it is possible; but the victim will not drink so much willingly.

56. For admixtures, *vide* answer to question 29. Moderate consumers do not use any admixture, except with—ganja, dried tobacco leaves; bhang, sugar, milk, and bhang massala; charas, prepared tobacco.

Excessive consumers use admixture with—ganja, mango leaf, betel-nut, dhatura seed, etc. Bhang, dhatura seed, etc. Charas, ganja.

Dhatura seeds are powdered and mixed with ganja or bhang. It is not generally done by the consumers themselves, but is added by others for

producing greater intoxication and for amusement without the knowledge of the consumer.

57. *Ganja*.—Eating rare. It is eaten by sanyasis to show their power. (Dadhi or ghi and ganja are eaten.)

Gurjat ganja is drunk by the priests (pandas) in Orissa. The intoxication produced is more intense and powerful than that by bhang. The effects last longer. Intoxication commences after some time. The intoxication is not so strong as in smoking.

Charas.—I do not know of any case of eating or drinking of charas.

58. The present system of Excise Administration is working fairly well, but is capable of improvement.

59. (1) There should be equalisation of retail selling price in every district; this must be looked to in the incidence of duty and not in license fees, which depend mostly upon the uncertain nature of the competition at the auction sales.

(2) The abolition of the system of private golas or the maximum wholesale price per seer in each district should be fixed by the Commissioner (taking into consideration the expenses of the goladar, the price paid to the cultivator, the cost of transit, the cost of maintaining the gola, rent, etc.). At present wholesale dealers charge very high prices (Rs 4 per seer) in some districts from the retail vendors.

(3) The wholesale dealer should have no connection with the retail vending of the drug.

60. The cultivation and manufacture are sufficiently controlled, but they are capable of improvement.

(1) Storing all ganja in public golas. This will prevent cultivators from selling illicitly in small quantities.

(2) The stock in the cultivator's house is never weighed, but is counted according to bundles. It is easy to remove the ganja from the cultivator's house illicitly. There is nothing to prevent the cultivator from taking out some ganja from several bundles and forming another bundle for illicit sale. In this way cases of illicit sale of ganja take place at Naogaon.

(3) In ganja season a large number of outsiders (non-residents) go to Naogaon and they can remove ganja by boat or road with other goods. The smugglers generally do not travel by rail from the Sultanpur railway station. It is not sufficiently controlled.

(4) The ganja belonging to each cultivator should be carefully and actually weighed at the *chatars* before storing. The staff at Naogaon should be strengthened.

(5) At the *chatars* ganja plants of inferior kinds are rejected and these are sometimes removed by ganja smokers. The *chatar* inspection is by no means satisfactory. All rejected plants should be burnt in the evening.

(6) A class of manufacturers go to Naogaon from Calcutta, and remain there for some months. I suspect they smuggle ganja. Their names should be registered in the ganja office, and their date of arrival and leaving the ganja mahal should also be noted. The present staff is insufficient for doing all this.

(7) The goladars purchase ganja through *dalals* (brokers). I am opposed to the existing system

of purchase through middle men. There should be direct dealing with the cultivators.

(8) Selling to goladars on credit by cultivators should be stopped.

(9) Ganja should be placed on the same footing as opium with regard to possession. The person in possession must account for the possession. The possession of ganja up to one powa, $\frac{1}{4}$ seer, is objectionable. The limit of possession should be reduced to half the existing quantity allowed.

61. Charas is not manufactured in Bengal. I have no experience about its manufacture, etc.

62. There is no cultivation of the hemp plant for the production of bhang in Bengal.

Wild bhang grows spontaneously all over Bengal, and control over its cultivation and manufacture would not be feasible with the present police and excise establishment.

The cultivation of bhang may be controlled partially by awarding liberal rewards to chaukidars, panchayats, and villagers. I do not mean wild bhang; its extirpation will be attended with great hardship to the people in general, and will cause serious discontent.

63. I have no objection to the present system of wholesale or retail vend of (1) ganja, (2) charas (3) bhang or majum. But I must here make the following observation :—

The wholesale vend should be separated from the retail vend as far as possible. The goladar holding retail shops sells ganja cheaper to his own shop, and charges exorbitant prices (in some places ganja is sold at Rs. 4 per seer by the wholesale dealers) from other retail vendors with small capital. The *bond fide* retail vendor should be allowed to work independently of the capitalist wholesale vendor, who also owns retail shops. This can be done by fixing the maximum wholesale price in each district.

64. I have no objection to the existing regulations governing the export and import of ganja, bhang, and charas, or of their preparations, from and into my province, and their transport within the province.

65. (a) The taxation on ganja, bhang, and charas is not reasonable if compared with each other, though one is not interfering with the sale of the other. The taxation on ganja is higher than that on charas or bhang, but the consumption of duty-paid bhang or charas is limited. The present rate of duty on charas is most inadequate (equal to chur ganja). The duty should be raised to double the present rate.

(b) The existing rate of taxation is reasonable and proportionate with reference to alcohol, etc. Ganja cannot bear any higher taxation. The intoxicating properties of ganja and alcoholic stimulants are of different nature and kind, and they are consumed by different classes of people.

66. Flat ganja contains more wood than round or small twig. Chur contains little or no wood. The duty has been imposed according to the ratio of the quantity of flower contained in each kind (*vide* answer to question 2). There should therefore be different rates of taxation for different kinds of ganja and for the different qualities of ganja (as Gurjat ganja). The ganja grown in the Gurjat States is charged with a duty of Rs. 3-8-0 per seer in consideration of its inferior quality, and its importation was legalized in 1890. Its intoxicating properties are less than those of Rajshahi ganja.

67. Having regard to the ultimate incidence of the tax on the consumer, I have no objection to

the present method of taxing (1) ganja, (2) charas, and (3) bhang. The incidence is already high, and poor people cannot consume the quantity they require for their moderate dose. Owing to the taxation of ganja by means of license fees instead of in the shape of duty, unequal selling prices at different shops occur. The shops paying smaller license fees can sell cheaper, and do under-sell his neighbour, who pays higher license fees. The consumers in one place pay treble the price paid by consumers in another locality where there is no competition. The duty on ganja and bhang is capable of increase in some districts.

68. There are in my province shops licensed for the sale of these drugs and their preparations (majum). It is not the general custom or practice to consume ganja, bhang, or charas on the premises. Strangers and travellers, sanyasis and bairagis, etc., occasionally sit in front of the shop and smoke in their own chillum, which they always carry.

Generally the consumers take ganja, bhang, and charas to their houses. Ninety-five per cent. of the ganja consumed is taken home, and 5 per cent. is consumed in the premises.

People do not object to their smoking in the premises. I am not opposed to the system of allowing people to smoke in the premises, as ganja and charas are smoked like tobacco, and the number of smokers is very small. Bhang is not smoked or drunk at the shop.

69. Yes, when necessary. These shops are not considered a nuisance as liquor shop or outstill, and the neighbours seldom take objection. Many *mudis* (grocers) accommodate such shops. The smokers are inoffensive, and they never become turbulent. If the neighbours object, their objections are duly considered. The Excise Deputy Collector or the Excise Sub-Inspector makes local enquiries and reports the matter to the Collector, who decides the objection. The sites of all shops are approved by the Commissioner of Excise and the Board, when the Proposition Statement for the settlement is submitted. People can come up to the Commissioner of Excise and the Board of Revenue if they are dissatisfied with the Collector's decision. The local public opinion should be considered if reasonable.

70. Duty is generally paid in respect to the ganja and other hemp drugs used. There is no general use of the untaxed drug. Wild bhang is used to a limited extent by the poor and for medicinal purposes, and no duty is levied on its consumption. The bhang imported by the Collectors and stored in golas pays duty.

Ganja Smuggling.—Facts regarding the importation and smuggling of hemp drugs from Native States into my province, to which I wish to draw the attention of the Commission :—

Hemp plant grows readily anywhere in the nineteen Tributary States called the Gurjat Mahal, and is easily prepared. The long line of frontier affords great facility for its illicit introduction into the British territories.

Ganja is regularly cultivated in all the Gurjat States, and smuggling to a very considerable extent goes on all along the frontier. The effect of the Government Order No. 165-T., dated 19th October 1878, prohibiting ganja cultivation in the Gurjats within three miles of the Mogulbandi frontier, resulted in a marked increase in the sale of the Rajshahi drug, and the withdrawal of that prohibition by Government Order No. E- $\frac{1}{2}$ -G-4, dated 6th September 1889, was followed by an immediate and marked falling off. Every ganja

cultivator in the Gurjats is a ganja vendor. The Gurjat men now require very little ganja to buy, for almost all of them cultivate ganja for their own use. Every ganja cultivator within the prohibited area sells ganja freely, which is opposed to Government Order No. $\frac{0}{108}$ 5, dated the 8th February 1889, and should therefore be stopped by again prohibiting the cultivation of ganja within three miles of the frontier. A wholesale prohibition of the cultivation of ganja is out of the question in a tract where the plant is indigenous, and where there is neither the will on the part of chiefs nor the establishment to enforce such a prohibition.

Balasore.—Bhang is regularly smuggled into the district from the Gurjat States, and the demand for the duty-paid bhang is very small (only 2 maunds 7 seers 6 chittacks of bhang was consumed in the whole district in 1892-93, and the total revenue derived was Rs 140).

Year.	GANJA. Consumption.			Duty. R
	M.	S.	C.	
1878-79	20	28	8	3,270
1879-80	19	16	3	3,091
1880-81	19	22	9	3,129
1881-82	23	6	2	3,724
1882-83	26	33	12	4,295
1883-84	32	25	5	5,229
1884-85	34	29	0	5,572
1885-86	37	15	8	5,990
1886-87	42	34	13	6,841
1887-88	41	9	5	6,954
1888-89	35	4	1	6,429
1889-90	35	5	15	6,055
1890-91	26	25	1	5,415
1891-92	24	32	15	4,962
1892-93	37	8	8	7,469

Puri.—Ganja is the second principal source of revenue in this district. The maximum revenue, Rs 30,372, was derived in 1888-89, i.e., the year just before the prohibition was withdrawn. Since then the consumption of the duty-paid drug and the revenue are on the decline. The largest

Year.	GANJA. Consumption.			Duty. R
	M.	S.	C.	
1878-79	98	25	7	11,326
1879-80	92	14	9	14,777
1880-81	102	9	13	16,360
1881-82	123	27	2	19,789
1882-83	128	8	6	20,513
1883-84	131	4	12	20,978
1884-85	126	0	9	20,162
1885-86	105	3	11	16,804
1886-87	116	22	0	18,660
1887-88	96	36	14	16,133
1888-89	93	11	8	18,657
1889-90	89	35	0	17,975
1890-91	77	39	7	15,597
1891-92	86	15	6	17,187
1892-93	91	29	2	17,831
Gurjat } Ganja }	5	14	14	538

the Gurjat ganja are the pandas (priests) living in the towns of Puri, Bhubaneswar, and Satyabadi. In the interior of the district ganja is smoked by the poorer classes. Smuggling is carried on most extensively from the Khandpara State, and thence through Khurda to Puri, where there is a ready and constant market, especially among the pandas (who are generally followers of the Siva). Traffic by cart and pack bullocks is extensive, and nothing is easier than to secrete ganja in bales or packages. Only the other day 39 seers of smuggled ganja was seized; it was being carried by two men in bundles. There are three chief routes of smuggling:—

- (1) *Vid* Bolghur and Bhubaneswar to Puri.
- (2) *Vid* Tangi by boat during the rains or through Kanas (Chubbishkud Pargana) to Puri.

- (3) From the Madras side from Rambha by boat over the Chilka Lake. In 1891-92 thirty cases of smuggling of Gurjat ganja were detected. In 1892-93 thirty-nine cases were detected.

On account of the high price of distillery liquor, people are taking to the smoking of ganja, but on account of large smuggling of Gurjat ganja there has been little increase in the consumption of and in duty on the drug. There were bhang shops in the district formerly. No bhang shop has been in existence since 1886-87. There is smuggling of bhang from the Gurjat States.

Cuttack.—Bhang is imported into the district from the Gurjat States, and is called "Gurjat siddhi." The consumption of duty-paid bhang is very small, as the following figures will show:—

Year.	Consumption.			Revenue. R
	M.	S.	C.	
1890-91	3	13	8	135
1891-92	2	3		357
1892-93	5	5	12	394

The revenue derived from majum is also very small:—

Year.	No. of license.	Revenue. R
1889-90	1	93
1890-91	1	63
1891-92	2	132
1892-93	2	245

Ganja.—Ganja is the second principal source of revenue in this district. The maximum revenue, Rs 48,038, was derived in 1888-89. By Government letter No. E. $\frac{1-0}{2}$ 4, dated 6th September 1889, the prohibition against the cultivation of the hemp plant in the Gurjats within three miles of the Mogulbandi has been withdrawn. Since then the people of the Gurjats have abandoned Rajshahi ganja almost entirely. During 1890-91 no ganja was purchased by Gurjat men; on the contrary, a large quantity of the drug was smuggled into the British territory. The smuggling is increasing every year, and a large number of cases of illicit possession and sale of Gurjat ganja have been detected. The cultivation was prohibited by Government Order No. 165-T., dated the 19th October 1878. Probably the order was practically given effect to

in 1880-81, from which year there has been a steady increase in the consumption of Rajshahi ganja up to 1889-90, when the restriction having been withdrawn by Government Order No. E. $\frac{1-0}{2}$ 4, dated 6th September 1889, the consumption again began to gradually fall off. The latter order has therefore caused an unnecessary loss in the excise revenue of the Bengal Government. The figures of consumption are given in the margin. Banki and the north-western portion of the Jajpur Sub-division are contiguous to the Gurjat States. The wild and hilly nature of the country with sparse population affords every facility for smuggling. The middle class people, Beharas, Panda Brahmins, and some of the Hatua castes, such as Teli, Khandayets, etc., consume ganja. Ganja is regularly cultivated in Keonjhar, Dhenkanal, Athgarh, Tigharia, Baramba, and Khandapara, and is largely smuggled at Sukinda and other places. Ganja is also smuggled by boat

by the river Mahanadi into the town of Cuttack from Bodh. The best Gurjat ganja in all the Tributary States grows in Bodh, Khandpara, and Athgarh.

I.—Keonjhar. Kusaleswarhat.—A fair is annually held here in which Gurjat ganja is sold. The fair lasts for three months. Ganja is brought from villages higher up the Mogulbandi frontier, and sold in the prohibited area.

II.—Dhenkanal.—Fakira or Konkra, Nannai, Ramsunda, Kamorsali, Salogari, Balisari, Brindabanpur, Netka, Chandia, Pingwa, Chitalpur, Halidih, Saidpur, and Kasipur are all ganja producing villages, in which ganja is also sold. Information was received that such was the case in most of the villages in the prohibited area. Ganja is brought from other Dhenkanal villages to Kabatband (surrounded on all sides by Mogulbandi lands).

III.—Athgarh.—Ganja is cultivated and sold in villages Gobra, Gonsai Sason, and Kanthapur, which are close to Gobra; Gurudajhati, Naogaon near Gurudajhati, Megha, and Patherchakra. Information was also received that in some other villages close to the frontier bordering on Banki, ganja was cultivated and sold.

IV.—Tigharia.—Ganja was found to have been cultivated in almost all the villages in Tigharia.

V.—Baramba.—Ganja is cultivated in almost all the villages in Baramba, and where it is easily available for purchase. The information was verified by local enquiries in villages Diniari, Satpuri (or Satkudia), Chandimangal, Gopinathpur, Toanpur, Mogagahiri, Telonia, Noranpur, and Bangur Singa.

VI.—Khandapara.—Ganja is cultivated in almost all the villages in the Khandapara State. Ganja is cultivated in Fatiagarh and other villages within three miles of the frontier.

Ganja in Hill Tippera.—Ganja is regularly cultivated in the territories of the Maharaja of Hill Tippera. Low caste up-country men, who have settled on the borders as well as a few Muhammadan fakirs and Hindu bairagis, travel into Hill Tippera and there consume ganja. There is reason to believe that they bring ganja into the British territory for personal consumption. Several cases of smuggling of foreign ganja of an inferior quality have been detected since 1883-84, but it seems that they do not smuggle it for trade. Occasionally sale of a small quantity of ganja by hill men to residents in British territory takes place at Sonamura, Udaipur, and other places. As the largest revenue of the Tippera District is derived from ganja, the cultivation of ganja within three miles of the British territory should be put a stop to. Ganja alone contributes more than one-half of the entire revenue. In ganja the revenue has increased from Rs29,354 in 1874-75 to Rs48,817 in 1892-93, while during the same period consumption has fallen off from 251 maunds to 100 maunds 6 seers 4 chittacks. The decrease in the consumption is partly due to greater use of the foreign ganja and to the weak detective staff, who show very little activity in detecting cases of this nature.

SOME POPULAR SONGS OF THE GANJA SMOKERS:—

I.

Accept the offering O Dhaja Dhari! (Hanumanji, the monkey god), the ganja is ready. Accept it O lord of Braja (Krishna), lord of the universe (Siva), lord of the Nepal mountains

(Siva—Poreshnath of Nepal), mother Kali (goddess Kali), beloved of Siva! Those who select it for smoking do a righteous act. The cluster of flowers of the ganja plant is nothing but the cluster of hair of the god Mahadeb. Smoke it again and again, and live for ever.

II.

Hari! (the name of Bishnu, who is one of the Hindu Trinity), how shall I describe to you the virtues of ganja? By a few pulls at the ganja chillum my soul becomes very cheerful, and I feel as if I were going to London in a steamer. But (suddenly) the rail carriage breaks, and I drop from the balloon that has burst. Bravo! the engine bursts by reason of the vigour of the pulls.

III.

Hail to thee, O frank Sada Siva! (Mahadeb).

Protect the creatures of the Kali Yuga (the iron age).

The soul is within and the creature without.

Three cuts and eighteen presses make the ganja fit for smoking.

Come, O ganja! let me smoke thee. May the mouth of those who condemn thee be filled with ashes! I smoke ganja by bundles, and puff out smoke like the ebb and flow of rivers. Money and land are for those who smoke ganja, and wretchedness is the share of those who look at the smoking. Pull upon pull, and off runs the wicked Pluto breaking through the hedge.

One chillum makes the smoker little better than before, two chillums refresh him, three chillums make him a vazir or nazir, and four chillums make him a king. Pull upon pull, and off runs the wicked Pluto breaking through the hedge.

IV.

Why did they call me a ganja smoker without knowing the virtues of ganja? Every leaf of ganja is full of sweet juice. If I do not smoke I die, and if I smoke I earn a bad name. The ganja flower floats on the water, and a ganja smoker is strong enough to draw a ship. Another ganja smoker starts up and cries out "Drag the ship to the shore!" Why did they call me a ganja smoker without knowing the virtue of ganja? In the lotus of my heart Sambu Nath (Mahadeva) himself is present. There also behold Siddeswari (goddess Kali), the beloved of the vagabond god and the Madhub of Dhamari, in his car. You have here a strange spectacle on earth. The vigour of the pull is such as to be able to make an engine burst, and my soul is intoxicated with joy. Why did they call me a ganja smoker without knowing the virtues of ganja?

V.

It is not without reason that I wish to smoke ganja. I cry out "Bobom Bom!" and smoke vigorously. I feel as if I were going in a smoke-emitting train to Benares. Such is the power of ganja that I kill many a vazir and nazir (build air castles), and for five cowries buy an elephant worth a lakh of rupees. To some I give thirty thousand as soon as they ask me for money. There is no defect in any part.

VI.

Hail to thee, Kali and Sada Siva! Protect the creatures of the Kali Yuga. The soul is without and the creature within. The God Kartik and Manai Pir (a Muhammadan saint much honoured

by Muhammadans in East Bengal). I hang a broomstick at the door of those who call me a stupid ganja smoker. The wife of the man who feels uneasy and restless after smoking ganja shall give birth to children in secluded places (that man shall be a cuckold, as he richly deserves to be, being devoid of manliness, and his children shall be illegitimate). Hail to thee Kali and Sada Siva!

VII.

The fair in the Kali Juga of Trinath (a god worshipped in Dacca by both Hindus and Muham-

madans), who can be seen by an offering of a pice worth of ganja. There is the delicious ganja, and the disciple sits with the ready chillum. He cries out *bom, bobom bom!* and smokes ganja. Betel and betel-nut worth one pice and without any other spices. Let us all smoke the chillums of ganja, and drive away all cares and pains. When my god Trinath goes to any house he causes three chillums to be made ready with a pice worth of ganja. Good brother! cold, fever, and headache fly from the man to whose house my god Trinath goes.

64. Evidence of BABU GOBIND CHANDRA DAS, Baidya, Deputy Magistrate and Deputy Collector, Malda.

1. I am Deputy Collector in charge of the Excise Administration of the district of Malda, and as such have had opportunities of obtaining information regarding these matters.

2. I have not had the advantage of seeing Dr. Prain's report, but the definitions seem to be fairly accurate. Round ganja is prepared also by being rolled with the hands, and is locally known as *gol ganja*. Round ganja prepared by being rolled under foot is locally known as *pakhri ganja*. Flat ganja is locally known as *dali ganja*, from the fact of its containing a considerable quantity of useless wood or twig. Both flat and round varieties come under the common appellation of *chipti ganja*. *Chur* is the local name applied to the third variety of ganja.

3. In Bengal bhang grows wild in every district. It is particularly abundant in the districts of the Rajshahi Division. In Kuch Behar also it is abundant.

Here in Malda the village sites, spare spaces in people's homesteads, and roadside waste lands are often seen covered with a dense growth of bhang.

4. Bhang is known by two other names, *siddhi* and *sabji*. I am unable to state if any botanical distinctions exist between them. But the names are indifferently applied.

5. I have nothing more to say on this point than what is contained in Watt's Dictionary of Economic Products of India. It is, however, worthy of remark that sufficient observations and experiments have not yet been made on this point to get correct ideas.

6. The growth of wild bhang is very dense. We often call it a bhang jungle.

7. (a) Ganja is grown in a compact tract of country with a radius of about sixteen miles lying in three districts, namely, Rajshahi, Dinajpur, and Bogra, but the largest portion of it is situated in the first named district. The following table shows the result of the cultivation of ganja for the last five years:—

1	2		3		4		
Year.	Quantity of land cultivated.		Quantity of ganja produced.		Average produce per bigha.		
	B.	C.	Mds.	S.	Mds.	S.	C.
1888-89 . .	2,433	4	8,266	24	3	15	14
1889-90 . .	2,408	1	8,021	37	3	13	■
1890-91 . .	2,669	18	6,681	29	2	20	2
1891-92 . .	1,315	15	6,040	■	4	23	10
1892-93 . .	3,538	0	7,574	0	2	5	10

These figures are taken from the published reports of Government. Though they pretend to be accurate even up to chittacks and seers and cottas, the recent settlements of the Dubalhati estate by Munshi Nandji have disclosed that they do not at all represent the correct facts. In fact, an examination of the last three columns leads one to suspect whether the figures of columns 2 and 4 have not been fudged to maintain the remarkable uniformity of column 3.

(b) Charas is not produced from hemp plant in Bengal. It is imported from Amritsar, Allahabad, and Nepal.

(c) In Bengal bhang is grown wild in great abundance in many districts, and specially in the Rajshahi Division. The best is collected chiefly in Monghyr and Bhagalpur under supervision of excise officers. No statistics about the area over which bhang grows and about the total quantity of bhang that is annually produced in Bengal are available.

(d) I am unable to say if *Cannabis sativa* is grown anywhere in Bengal for its fibre. The vernacular name for the hemp fibre is *san*. It is grown largely in East Bengal. The plants are not, however, similar in appearance to *Cannabis sativa*.

8. It will be seen from the annexed table given above that the area under ganja cultivation is abnormally large in 1892-93 compared with 1891-92. The cause usually assigned for these yearly fluctuations in area is that ganja is a precarious crop of which the profits may be very large or (in a bad season) next to nothing. After a good season cultivators are encouraged to rush in for licenses, and similarly a bad crop contracts the area of operations. Below are given figures showing the average area under cultivation for periods of five years from 1878-79 to 1892-93:—

	Bighas.
From 1878-79 to 1882-83 . . .	1,980
" 1883-84 to 1887-88 . . .	1,968
" 1888-89 to 1892-93 . . .	2,473

The increase during the last quinquennial period is more than 25 per cent. This extension in cultivation does not, however, seem to have been caused by increased demand for the drug. For the average quantities exported from Rajshahi into Bengal, Assam, and other provinces are—

	Mds.
For 1882-83 to 1886-87 . . .	7,504 and
" 1887-88 to 1891-92 . . .	7,646

(Figures for 1892-93 are not available.)

The increased demand in export is therefore less than 2 per cent.

It seems therefore that the extension in the area of ganja cultivation is due to its being a profitable

occupation, and therefore likely to attract more land and labour towards it.

9. I have nothing to add to the particulars given on this point in Watt's Dictionary of Economic Products. Babu Hem Chandra Ker's report deals with the subject at length.

10. I understand from my enquiries that there are no special classes who cultivate the ganja plant at Rajshahi, but the Muhammadan cultivators preponderate over the Hindus.

11. This is not known to be ever done in Bengal.

12. In Bengal there is no reason to suppose that hemp is anywhere cultivated for the production of ganja, except under Government supervision at Rajshahi.

13. The cultivation of the hemp plant for ganja is restricted in Bengal to a compact tract of country with a radius of about sixteen miles lying in three districts, namely, Rajshahi, Dinajpur, and Bogra.

Prior to 1853 the cultivation of the hemp plant seems to have been under little or no restriction. Wild hemp grew everywhere; but it was found that hemp, producing ganja, grew only in the Rajshahi Division. Hence in 1854 rules were framed for putting the cultivation of ganja under proper control. The fact that though there was no restriction in its cultivation, and that though its cultivation was a profitable undertaking, still the ganja-producing hemp grew only in Rajshahi, shows that soil and climate have an important effect on its growth. Sufficient observations and experiments do not appear to have been yet made to study the conditions of climate and soil best suited for the cultivation of the ganja-producing hemp plant. The only broad fact is that the narcotic properties of the plant are developed when it is grown in the plains, whilst in the hills the plant is deficient in narcotic properties, but is valued for its fibre.

Wild hemp grows everywhere in Bengal, and I think, if the male plants are destroyed in time, the female plants could be made to yield ganja. But I do not think the quality of the ganja will be as good as that at Rajshahi. In fact, the experiment at Sibpur for the cultivation of ganja-producing hemp under the supervision of experts has not proved a success, only one collector undertaking to sell this ganja at Rs 10 per maund only.

14. See answer to question 7. The cultivation and preparation of ganja are conducted at the same place by the same persons.

15. See answer to questions 5 and 9.

16. Bhang is prepared by the people in their houses. It can be prepared from the hemp plant wherever grown.

17. I am unable to answer this question.

18. I am unable to speak about charas and bhang. But the periodical inspections of the ganja golas under my charge show that ganja is very quickly deteriorated by damp. Otherwise ganja keeps well for a year or more. The practice in this district is to destroy by fire on the 31st of March every year all ganja more than a year old. To prevent the effects of damp, I would construct the golas with corrugated iron with wooden walls and floors. In brick-built golas there should always be apertures for the admission of light and air.

19. I can only speak about ganja. Besides being used for smoking, I am informed from some ganja vendors that some individuals eat ganja

with betel leaves and that others drink ganja by making a beverage with milk or water and black pepper. These are, however, said to be very rare, and no special locality can be mentioned where they are prevalent.

20. Speaking only about ganja, I do not know of any special caste or tribe specially addicted to this drug in Bengal. The sanyasis, the bairagies (mendicant Baisnavs), and the Gir Gosains are, as a rule, addicted to ganja smoking. The sanyasis or religious ascetics are spread all over India, and are too well known to be described here. The bairagies are also well known. With regard to them, it is to be noted that their females also freely smoke ganja. The Gir Gosains are a peculiar class of people to be found in this district, and also, I believe, in Muzaffarpur and Darbhanga. They observe lifelong celibacy, but are in all other respects undistinguishable from ordinary house-holders. Alcohol is strictly forbidden amongst them. Almost all of them, however, are in the habit of consuming large quantities of ganja. Their number is very small in this district, not exceeding, I think, about 100 souls.

The broad distinction, however, to be made as regards those who consume ganja and those who do not, is that, as a rule, ganja smoking is confined to the lower classes of the people, and is extremely rare amongst the higher classes. It is the day-labourers, artisans, cultivators, boatmen and such like that consume the greatest amount of ganja. The boatman of East Bengal are conspicuous for ganja smoking and have been referred to elsewhere. In this district the cultivators of the Barindra (see Mr. O'Donnell's Census Report Volume III, page 2) are very much addicted to ganja. They seem to think that ganja is capable of averting malarial fever. The notion, however, seems to be erroneous, as the females of this tract are remarkably healthier and robuster than the males. It is the males who consume ganja. The females are not addicted to ganja smoking.

The question as to what proportion of the people consume ganja is, I think, almost impossible to answer, even for a limited tract of country.

In Malda we have at present 60 ganja shops dotted over the whole district. There is nothing to show that the localities of these shops have been selected with reference to the number of consumers to be supplied from each shop. The consumption of ganja no doubt varies from shop to shop; but beyond that we have got no other data to show the number of persons who take their supply from any of these shops. Again, in making an estimate of the number of consumers, we must bear in mind that ganja is always consumed in company, and that for each person purchasing ganja from the licensed shop, we have generally two or three others who do not come to the shop at all, and who often do not have to pay anything, but are able to satisfy their taste for ganja by the liberality of their wealthier companions.

The only way that suggests itself to me for determining the number of persons who consume ganja in any locality is, first, to ascertain the average daily consumption of ganja of a ganja smoker and the average consumption of ganja from the licensed shops of that locality.

Thus, taking the district of Malda, I have tried to shew in my answer to question 26 that it would be as near the truth as possible to take the daily average consumption of a man to be two pice worth of ganja. In a month, therefore, he con-

sumes a rupee worth of ganja, and in a year he has to spend Rs 12 for the drug.

Now the retail price of ganja in this district is about Rs 20, and the average annual consumption of this drug in this district for the five years ending 1891 was 81 maunds. Consequently the number of ganja consumers in the district is $\frac{81 \times 40 \times 20}{12} = 5,400$ or, say, 5,000 in round numbers.

Now, the population of this district, according to the last census, was 814,919, of whom 399,917 were males and 415,002 were females, and 188,868 were boys whose age did not exceed fourteen years. Accordingly, we find that in this district for every 1,630 persons one is a ganja smoker, and for every 423 adult males older than fourteen years one smokes ganja.

21. The following table gives the consumption of the three varieties of ganja in the different divisions of Bengal for five years :—

1887-88.	1888-89.	1889-90.	1890-91.	1891-92.
Chur. Mds. Round. Mds. Flat. Mds.	Chur. Mds. Round. Mds. Flat. Mds.	Chur. Mds. Round. Mds. Flat. Mds.	Chur. Mds. Round. Mds. Flat. Mds.	Chur. Mds. Round. Mds. Flat. Mds.
		Chittagong Division.		
20 17 102	9 45 93	9 30 116	8 38 132	3 27 145
		Dacca Division.		
2 210 596	38 233 600	41 175 682	57 202 624	29 172 638
		Rajshahi Division.		
7 158 380	71 143 310	90 102 329	114 100 307	44 54 420
		Bhagalpur Division.		
25 408 787	236 235 653	288 127 630	302 135 645	142 130 775
		Patna Division.		
13 527 1,589	469 127 1,447	317 33 1,499	295 90 1,395	124 101 1,265
		Chota Nagpur Division.		
2 59 70	23 48 54	25 60 49	19 57 63	80 60 79
		Orissa Division.		
2 297 2	97 173 10	5 250 9	3 237 4	3 217 ■
		Burdwan Division.		
6 250 13	20 237 14	19 241 10	13 263 13	10 264 18
		Presidency Division.		
87 792 96	59 767 113	94 741 120	87 792 96	57 202 624

Taking these figures alone, it is to be observed that round ganja is in favour in the Presidency, Burdwan, and Orissa Divisions, whilst the flat is preferred in the Patna, Bhagalpur, Rajshahi, Dacca, Chittagong, and Chota Nagpur Divisions. The last named division seems to vacillate between the flat and the round forms, and in 1889-90 actually fell from its allegiance to round ganja and took a greater quantity of the flat form.

Geographically it will be possible to draw a curve line across the map of Bengal, so that a traveller following the line and starting from Chittagong and ending with Chota Nagpur will always have the flat ganja consuming people to his right

and the round ganja consuming people to his left. There seems to be no reason, however, why the people of Eastern Bengal should, in their ganja consumption, exhibit an affinity with the people of Behar rather than with the people of Calcutta and Burdwan.

As a matter of fact sales of ganja in a locality so far as a particular form of it is concerned, are affected by other considerations. Choice of the consumers is an insignificant element in them.

In the first place the production of chur being limited, one must necessarily take either a large quantity of flat or round. Now it is more profitable to sell round than flat ganja. Consequently every wholesale purchaser wants to take the round variety in preference to the flat. I understand that the goladars of the Presidency and Burdwan Divisions are in the habit of advancing loans to the ganja cultivators of Rajshahi in order to take ganja from them on more favourable terms than what are allowed to others. For these favourite goladars the cultivators prepare a specially good form of round ganja, known as *gol* or *jesaria*. Hence the best part of the round ganja being taken by these men, the wholesale dealers of other divisions have to fall back on flat ganja to make up their requirements.

Again, the Government authorities also exercise some control in the matter. Both in the district where the ganja is to be transported and in the district from which it is to be brought the Government officials try to force as much of the flat ganja on the wholesale dealers as they can, the idea being that flat ganja is less injurious, and by its large consumption likely to bring in a larger amount of revenue.

22. Charas is not produced in Bengal, but is imported from Allahabad and Amritsar, and also rarely from Nepal.

23. Bhang is often used for smoking; but I am not aware of any special classes of the people amongst whom this practice is prevalent. It is, I think, confined to individuals who may have a fancy to this form of consumption rather than to any special classes. The common notion is that bhang is the stepping-stone to ganja. A novice begins with tobacco, then passes on to the smoking of bhang, and finally takes up the ganja.

24. I am unable to answer this question. As far as I am aware, bhang is either drunk or smoked. Eating of bhang is not prevalent in any place known to me.

25. The following table shows the consumption of ganja in Bengal for the last ten years for which figures are available :—

Year.	Chur.	Round.	Flat.	Total.
	M. S. Ch.	M. S. Ch.	M. S. Ch.	M. S. Ch.
1882-83 .	808 19 13	2,225 38 2	2,579 14 14	5,645 36 14
1883-84 .	430 37 3	3,587 21 7	1,839 0 6	5,881 0 13
1884-85 .	165 37 15	4,408 37 5	1,223 8 14	5,798 4 2
1885-86 .	114 13 13	3,205 23 2	2,397 32 12	5,717 29 11
1886-87 .	365 36 15	3,070 38 9	2,827 10 14	6,264 6 6
1887-88 .	120 14 ■	2,747 3 15	3,682 33 ■	6,550 11 7
1888-89 .	962 6 7	2,151 20 7	3,299 24 1	6,413 10 15
1889-90 .	889 38 ■	1,762 32 0	3,448 19 13	6,101 9 15
1890-91 .	899 20 4	1,917 19 8	3,278 37 9	6,095 31 5
1891-92 .	424 12 2	1,795 21 9	3,457 37 5	5,677 31 6

These figures are derived from the published reports of Government. From the extreme fluctuations in the consumption of the three different varieties of ganja in different years, the totals against the different years do not convey any correct idea whether consumption is really increasing or decreasing. Flat ganja and round ganja

contain a large amount of useless wood, so that if a man purchases a seer of flat or round ganja he really consumes 12 or 14 chittacks, throwing away the remaining 4 or 2 chittacks as useless wood. To find out whether the consumption is increasing or decreasing, we must reduce these figures into the terms of one variety, say, chur, by our knowledge as to the quantities of ganja and wood contained in flat and round ganja. I think it would not be far from the truth to take a seer of flat and round ganja to contain 12 and 15 chittacks of ganja respectively, so that to reduce to the chur kind we must multiply by $\frac{12}{15}$ and $\frac{12}{15}$ the figures representing, respectively, the consumption of flat and round ganja.

After making these corrections, we shall have further to deduct from the results the quantities of ganja exported into Nepal and the North-West from the districts of the Patna and Bhagalpur Divisions, for they do not represent consumption in Bengal; whilst an increase or decrease in the export may so alter the figures as to cause misapprehension with regard to consumption so far as Bengal is concerned.

It is not, however, possible to apply the corrections for the different kinds of ganja exported, for the published reports give only the total quantity exported every year, without distinguishing the different varieties. The revenue derived from the export of ganja into the North-West has, however, been given for every year. This, divided by the prevailing duty on a maund of chur ganja in that year, will give, as approximately as possible, the chur equivalent of the ganja exported into the north-west.

But even this plan cannot be followed in the case of ganja exported into Nepal, for no figures are available to show the revenue derived from this source.

The following table shows the quantity of ganja exported into the North-Western Provinces, the revenue derived from them, the rate of duty on chur ganja, and the chur equivalent of ganja so exported:—

1	2	3	4	5
Year.	Quantity exported.	Revenue.	Rate of duty per maund on chur.	Chur equivalent.
	Maunds.	₹	₹	Maunds.
1882-83	532	99,524	200	497
1883-84	681	1,38,707	200	643
1884-85	681	1,30,910	200	654
1885-86	720	1,34,503	200	672
1886-87	849	1,58,519	200	702
1887-88	871	1,64,917	200	824
1888-89	860	1,64,117	260	631
1889-90	789	1,47,905	270	471
1890-91	668	1,27,065	280	454
1891-92	467	96,497	280	345

There are several discrepancies in the figures for the same year as given in different reports, and it is difficult to find out the correct figures. Thus, the quantity of ganja exported into the North-Western Provinces in 1889-90 is given differently in three successive annual excise administration reports (1889-90, 1890-91, and 1891-92). In such difficulties I have chosen that figure which appeared to me to be most correct.

The quantities of ganja exported into Nepal were—107 maunds in 1888-89, 75 maunds in 1889-90, 120 maunds in 1890-91, 228 maunds in 1891-92.

Now, making the corrections for round and flat ganja and deducting the quantities exported in the North-West and Nepal, we have for the last ten years the consumption of ganja in Bengal expressed in the chur form as follows:—

	Maunds.
1882-83	4,333
1883-84	4,531
1884-85	4,562
1885-86	4,240
1886-87	4,573
1887-88	4,633
1888-89	4,715
1889-90	4,583
1890-91	4,582
1891-92	4,126

From this it appears that up to 1888-89 the consumption of ganja was steadily on the increase. There was a falling off in 1885-86, but it must have been due to temporary causes, as both before and after this year the consumption was appreciably larger than in this year.

From 1889-90 the consumption shows a falling off. The falling off is very considerable in 1891-92. Three years, however, is too short a period to deduce any general conclusion. As in 1885-86, the falling off in consumption in 1891-92 is ascribed to a short crop in the producing district and a consequent rise in the wholesale price of ganja. The quantities of ganja estimated to have been produced were in—

	Maunds.
1884-85	7,076
1885-86	3,887
	and
1890-91	6,681
1891-92	6,040

General rise in the price of food grains, I think, accounts for these fluctuations in consumption more than anything else. It is the lower classes of people who most consume the drug, and it is they that are most affected by bad harvests.

It is worthy of notice that complaints have come from several districts that, owing to the rise in the price of country spirits consequent on the introduction of the Sudder distillery system, several persons who were accustomed to liquor have begun to consume ganja.

26. Before this question is answered, one must ascertain where to draw the line between moderate and excessive consumers. In the first place ideas of moderation and excess vary with individuals. I have heard that an eminent medical man once laid down that a person would not overstep the bounds of moderation by taking per diem two bottles of beer, one bottle of port, and four pegs of whiskey. On the other hand, a teetotaler or a missionary gentleman may be shocked even at a man taking a cup of champagne. In the same way I once met a *ganjakhori* spending four annas per diem on the drug, gravely assuring me that no man on earth can manage to satisfy his craving for ganja by consuming a less quantity of the drug than what he himself does.

Again, what is moderation to one may be excess to another person—constitution, temperament, age, climate, and many other circumstances all tend to affect the question.

One way of distinguishing the moderate from the excessive consumers would be to regard those to be moderate who have some fixed times in the day for consuming the drug, and those to be excessive consumers who have managed to contract such a longing for the drug as not to be confined to any particular times or hours in the day, but to consume as much of the drug as he can get and as often as he finds the opportunities to do so.

Applied to the particular drug (ganja) of which I am now speaking, the above test is rather difficult of application. For if we discard the quantitative test (*i.e.*, the test of regarding one to be moderate who consumes so much ganja, and one to be excessive who consumes more than that quantity), we can have no means of determining what proportion of ganja smokers are moderate, and what proportion excessive, without a detailed inquiry into the habits and circumstances of each particular individual. In fact, without the assistance of some quantitative test, we may, so far as this particular case is concerned, arrive at some manifestly absurd conclusions.

Ganja smoking is a habit seen rarely amongst the higher classes of the people of this province. Its use is confined to the lower orders. Now, moderation is a virtue for which the lower orders of no country is conspicuous. In fact, they are conspicuous for the opposite quality, *i.e.*, extravagance in expenditure with regard to marriage, drinks, and other intoxicants. It will not be far from the truth to say that a man belonging to the lower orders will spend in his drink or habitual narcotic as much as he can conveniently afford, *i.e.*, a man of his class will consume as much of his favorite intoxicant as his means will allow. Consequently we arrive at the conclusion that ordinarily a ganja smoker will set no limit to his use of the drug, except that which will be imposed by his resources. He will, therefore, be glad to consume the drug as often and as much as his means will allow. Judged by the test of moderation set forth above, every such man should be regarded as an excessive consumer, for he is always ready to consume the drug, and is only prevented from doing so by want of means. As a matter of fact, however, a large number of people have so little to spare after satisfying the first necessities of life, that what little they spend in ganja can hardly be said to make them excessive consumers in any sense of the term. On the other hand, there are people possessed of better means, who, though they may be in the habit of consuming the drug only at stated hours of the day, consume it at those hours in such a large quantity that they cannot be called moderate in any sense of the term.

Here then ultimately we shall have to fall back on a quantitative test if we wish to distinguish moderate from excessive consumers.

I have taken some statistics on this point. The ganja shop at this town of English bazar sells ganja at the rate of Rs 20 a seer. I inquired of a large number of persons who come to purchase ganja at this shop as to their daily consumption of the drug. Altogether 378 persons were examined. Of these, 247 persons stated that they spent a pice a day on this drug, 106 persons gave two pice as their daily expenditure on ganja, whilst only 13, 7, 1, 3, and 1 stated their daily consumption to be three, four, five, eight, and ten pice, respectively. I am sure most of these men understated their consumption to a very considerable extent. But looking to the fact that purchasers of ganja are not the only persons who consume the drug, and that a large number of persons who consume ganja do so at the expense of their richer companions, I think it is safe to say that the majority of ganja smokers do not spend more than two pice a day upon ganja.

The retail price of ganja in this district is about Rs 20, so that two pice can fetch a man only one-eighth tola of ganja. This is not sufficient for more than three chillums. I think it cannot be con-

sidered as excessive. On this datum it can be said that the majority of the ganja smokers are moderate consumers. Beyond this, however, it is not possible to fix any proportion between moderate and excessive consumers.

As regards occasional consumers, all that can be said is that their number is extremely small. In fact, it is impossible for a man to consume even a pretty large quantity of ganja unless he is a habitual consumer and has kept up his habit by daily use.

27. I have already mentioned that the upper classes of the people very rarely take ganja (my answer has reference only to ganja). It is only the lower classes that are mainly addicted to it. In general two broad divisions may be made amongst the ganja smokers—(1) labourers, cultivators, boatmen, and, in fact, such as have to earn their bread by constant manual labour; (2) the village badmashes who follow no occupation, but generally form a band amongst themselves, and are a constant source of nuisance and trouble to their peaceful neighbours, and who follow no occupation in particular, but manage to subsist by the earnings of others, or by hereditary properties, or by petty thefts, etc.

The first class are moderate consumers. They smoke ganja after doing their legitimate work, say, once in the morning, once in the evening, and sometimes once at midday. Amongst these may be mentioned the boatmen of East Bengal and the Raj Bangsis and Koches of the Barindra. The boatmen of East Bengal believe that ganja enables them to withstand the inclemencies of the weather. But this seems to be an erroneous assumption. New boatmen learn ganja smoking from the old ones, who, having acquired the habit, extol it to the new comers. The new comers begin to take the drug at first *gratis* in the company of the inveterates, who, whenever any new boatman takes up the calling, are generally fond of telling him their own adventures and difficulties, and generally end with a recommendation for ganja as an elixir.

The Raj Bangsis and Koches do not take much of liquor, and, being well off, generally indulge in this drug as a luxury. These men are very indolent, and prefer to stay at home and smoke ganja whilst their women do all the work for them.

Amongst the excessive consumers are to be found, as I have said, the village vagabonds. To this class also belong the sanyasis and the bairagis, and also the Gir Gosains. The sanyasis and bairagis are generally those who, in early life, were of the same class as village vagabonds, and who became sanyasis and bairagis after committing some crime, or having been detected carrying on an intrigue with some females.

28. (a) 1 to 2 pice a day.

(b) 3 pice to 4 annas a day.

29. Ganja is smoked with tobacco leaves, the proportion being half and half for moderate consumers, and varies with others who want to make the preparation stronger or weaker according to taste and habit. No one, however, can take ganja without tobacco. Dhatura is used by persons who have gone to a fearful excess. The object of mixing tobacco is to render the preparation mild—pure ganja being too strong to be smoked alone. The object of mixing dhatura is to render ganja stronger than it naturally is. Dhatura smoking often leads to insanity. I have not heard anything of bhang massala.

30. Speaking only about ganja, I think the drug is rarely consumed in solitude. In exceptional cases, such as in the course of a journey, a habitual consumer may be compelled to take the drug alone, but ordinarily one never smokes ganja without his chosen company. Several ganja smokers with whom I discussed this question were surprised at my enquiries as if it was absurd to even suppose that a man can smoke ganja in solitude. One ganja smoker who spends 4 annas per diem for the drug assures me that he would not be able to consume a pice worth of ganja if he had not his two or three chosen companions to smoke with. The same men assure me that the

unable to say what would be the number of sanyasis in Bengal; but the boatmen of East Bengal would exceed 20,000 in number.

35. Speaking for ganja and bhang, I am of opinion that it will not be feasible to prohibit the use of these drugs absolutely, unless, of course, an enormous increase of establishment (say, fifty times the present scale), wholly out of proportion to the usefulness of the object to be gained, is sanctioned. But, subject to this remark, I hold that it will be both feasible and desirable to restrict the use of these drugs by greatly increasing the duties on their consumption. I intend to deal



20 of the previous year's report. It is most embarrassing to find that the two sets of figures are wholly discrepant, and there is nothing to indicate which of them are correct. Taking, however, the later figures to be correct, it is possible to put them side by side with the consumption of ganja in these districts for the corresponding years, and thus ascertain whether increased consumption of the one has been accompanied by decreased consumption of the other.

In doing this, however, we must note, as I have already pointed out, that a seer of flat and a seer of round ganja contains about $\frac{1}{8}$ and $\frac{1}{16}$ parts respectively of real ganja, and the remaining parts of useless wood. We must, therefore, take into account this difference, and in expressing the consumption of ganja, flat and round ganja consumption must be reduced to the chur kind on the basis of these proportions. Making these calculations, we have the consumption of ganja and liquor for Rajshahi Division with Malda and Purnea as follows:—

1888-89.	1889-90.	1890-91.	1891-92.
Country spirits in gallons 4 P.			
174,048	170,747	187,785	176,998
Ganja in Maunds.			
840	812	829	737

From the above we see that increased consumption in liquor has been accompanied by increased and not decreased consumption of ganja, and *vice versa*; decreased consumption of liquor has been accompanied by decreased consumption in ganja. The figures, therefore, negative the inference that ganja has been abandoned in favour of liquor. They point out that the fluctuations are due to causes which affect equally the consumers of both these articles, such as general prosperity or adversity of the people.

37. I have not observed the effects of charas-smoking. No charas shop exists in the district of Malda.

38. I understand that flat ganja, when bereft of the useless wood, produces on the consumer effects which last for a longer period than the other varieties of ganja. It is, however, milder than the round ganja, which is again milder than the chur.

39. The normal way of consuming bhang is by drinking, and of consuming ganja is by smoking. The other modes are abnormal and, therefore, more injurious.

40. Bhang and also ganja enter into the composition of many medicines recognised by the Ayurvedic system. Bhang in small doses is taken as a household medicine in case of indigestion brought on by over-eating or any similar cause.

I am unable to say whether any of these drugs is used in the treatment of cattle-disease.

41. I think none of these virtues really exist in any of these drugs. It is, however, a fact that a man who had become a slave to any of these drugs will not be able to (a) digest his food, or (b) to bear exertion, exposure or fatigue, or (c) to withstand the effects of an unhealthy climate, without these drugs. But then the virtues in that case do not exist in the drug, but are created for it by its votary. A ganja-smoker will not be able to take his food unless he takes before his usual chillum of ganja. Boatmen, particularly those of East Bengal, pretend that they cannot bear the exposure and fatigue without taking ganja. But I know boatmen who manage to do without ganja, and

yet do not fear to expose themselves, when necessary, to rain and sun. In East Bengal it is only the Sudra boatmen who are pre-eminent in their praise of ganja. But the Namasudra and Muhammadan boatmen, who are, as a rule, more robust than the Sudras, very rarely take ganja. The Sudras take ganja because they have the vicious propensity for it, and not because it has any inherent virtues in it. In the same way the Raj Bangsis and Koches of Dinajpur, Rajshahi, and Malda extol ganja as a preventive of malarious fever. But malaria is there all the same, and hundreds of people are dying every month whether they smoke ganja or not. In these tracts the women, who do not smoke ganja, are healthier than the men.

42. Far from considering it harmless, whether taken in moderation or excess, I consider ganja to be the most injurious form of intoxicant used by any people on earth. Until quite recently, I have never heard anybody saying a word in favour of this drug. On the contrary, sweeping denunciation has always been made as to the effects of ganja-smoking by persons most competent to give an opinion on the subject. I think it worth while to quote some of these opinions.

Mr. Grant, Collector of Balasore, observes (see Bengal Excise Administration Report for 1883-84):—

"I can only regard this rapid increase in the use of ganja as altogether lamentable. It is the only exciseable article in favour of which nothing can be said. It seems to have *absolutely no virtue*, and to do harm the very first time it is used. In shorter time than any other intoxicant, it establishes a craving habit, and is more irresistible than that created by any other. I cannot believe that the dearness of opium has done much to increase the consumption of ganja, and most unfortunately the price of ganja, which was very cheap before, has fallen during the year."

"I said last year that I thought it regrettable that the price of opium has been raised. I can only repeat my opinions; at all events as far as Orissa is concerned, the measure is a bad one as regards the morality of the districts and as regards the revenue. For the past two years the local consumption of opium (a dear drug yielding a high revenue, a medical drug, hurtful only if abused) has greatly decreased, and its place has been supplied by a cheap drug that has nothing but the *most seriously bad result* from any use of it at all."

"Under ordinary circumstances, it is desirable to discourage the use of ganja by making its price as high as it can safely be made; but, under the circumstances of Orissa, it seems to me to be very unwise to do what amounts to forcing people to the extended use of *most pernicious* and cheap and accessible drug by putting what becomes a prohibitive price on the use of a very dear, comparatively harmless and often useful drug. If the thing is possible, I would reduce the price of opium in Orissa to what it was in 1879-80, and I would also raise the duty on ganja from R4 to R5."

Though there would be few to agree with Mr. Grant for lowering the price of opium, I think everyone would endorse his views on the effects of ganja-smoking. In fact, in the next line we find.

"The Commissioner agrees with Mr. Grant in his condemnation of ganja, and is in favour of the duty being raised."

In the preceding year Mr. Grant had delivered himself as follows on the subject :—

"I am afraid that this (increase in the consumption of ganja and decrease in that of opium) is something very like an unmixed evil. It means that.....people are substituting ganja,— a cheaper and *infinitely more mischievous and deleterious drug*. Instead of consuming maunds 3—11 of comparatively harmless opium the people consumed maunds 3—27—11½ of ganja, which is, beyond all comparison, the drug which has least to be said in its favour and most to be against it. I strongly advocate a return to the old rate for opium, not because the new rate has so materially decreased the revenue, but because it is fast driving the people of Balasore to that resort to ganja which we know to be the root of the evils in the Uriya character."

Extreme views on a subject of this kind should no doubt be accepted with caution. But when we find that there has, for a long series of years, always been a consensus of opinion amongst persons who had the best opportunities to study the question, I think that opinion cannot be thrown aside easily. Elsewhere I have quoted from several published reports of Government how Government, the Board, and the subordinate officials have always spoken against ganja, and how they considered that it would be a blessing for the people if they were to substitute alcohol for ganja. Here I shall content myself with two or three more quotations in support of my views.

Let us see what His Honour the Lieutenant-Governor says so long ago as 1874. Reviewing the excise administration of 1873-74, His Honour says as follows (*vide* page 3 of the resolution appended to the report):—

"The Member in charge does not think that the time has yet arrived for any further increase of the duty. It appears, however, to the Lieutenant-Governor that, of all excisable articles, the imposition of an almost prohibitive duty on ganja admits of the best justification upon both moral and economical grounds. It is generally agreed that even the moderate consumption of ganja is deleterious, and that its use leads to crime, to insanity, and other dreadful consequences. The conditions of its production are such that surreptitious cultivation appears scarcely to be possible. The cultivation of the ganja plant is not, like that of the poppy, spread over an extensive area. The whole of Bengal is supplied with ganja from a tract not exceeding 800 acres in Rajshahi. Supervision is consequently easy, and the imposition of a higher duty, if it resulted in a loss of revenue, would do so only by diminishing consumption. For the sake of the people, the Lieutenant-Governor earnestly commends this subject to the consideration of the Board."

Let us now see what the Bengal Excise Commission says on this subject—

"It is to be regretted, however, that this is due to some extent to the use of the *pernicious drug ganja* in these tracts."

Let us again see what the Government of India says—

"Ganja is a drug which is far more injurious in its effects than spirit or any other drug commonly consumed."—(Despatch to the Secretary of State, No. 29 of 1890, dated Calcutta, the 4th February 1890.)

43. Ganja-smokers, whether indulging in the drug in moderation or in excess, are anything but agreeable neighbours. Always irritable and

quarrelsome, neither age nor sex nor respectability would count for anything with them. They are incapable of bearing the mildest opposition or contradiction, though others would be expected by them to submit to their views as a matter of course. They would not shrink from insulting the most respectable and inoffensive persons on the slightest provocation or on some imaginary cause of provocation. To preserve self-respect and honour, every respectable person would do his best to avoid coming in contact with a ganja-smoker.

The evil is further intensified by the fact that these ganja-smokers are always to be found in company. There is always to be found a circle of ganja-smokers in a village. They form the desperate, the badmash section of the people, and the fact that few would be willing to contradict them makes them the more arrogant and oppressive.

Helps in one of his essays says that it is nevertheless a fact, though we do not generally recognise it, that the constant presence of a few bad characters in a neighbourhood brings to its more peaceful members infinitely more trouble and unhappiness than any temporary epidemic or pestilence.

I think the remark is very appropriate with reference to the presence of these ganja-smokers in our villages.

44. Ganja-smokers say that the immediate effect of smoking ganja is something more to be felt than described. So far as outward manifestation is concerned, ganja-smoking produces an atmosphere of intolerable odour and induces in the smoker a fit of coughing. These effects are anything but agreeable. But there is no doubt that, after the smoke is taken, the consumer feels refreshed and a sort of inward pleasure. Intoxication, *i.e.*, becoming incapable of controlling one's self, is scarcely produced. But generally the man becomes talkative, prone to laughter, and eager to assume an air of self-importance. I do not think it has a tendency to allay hunger, though in the excitement of the moment some sort of abnormal energy may be called forth, and the man induced to undergo exertions or troubles which, under ordinary circumstances, he would not readily undertake.

In the case of habitual consumers, the use of ganja and bhang does not create any new appetite, though persons who have become addicted to any of these drugs will have no taste for food if they cannot take their usual smoke.

Occasional consumers of bhang become capable of eating a larger quantity of food by taking bhang than their usual diet; but the after effects of over-filling the belly are produced in such cases as much as in any other case.

The immediate effect of ganja-smoking lasts for a very short time—at most an hour; that of bhang drinking lasts for a considerable time like alcohol.

The after effects are reaction of the temporary excitement. Depression follows as a necessary consequence.

A person addicted to any of these drugs will feel great uneasiness if he be unable to take his usual smoke. He will have no taste for food.

45. The use of these drugs is, in my opinion, productive of noxious effects, physical, mental, and moral. Physically, it impairs the constitution and produces chronic bronchitis and asthma. Almost all ganja-smokers suffer from chronic bronchitis or asthma. Ganja-smokers generally die of consumption or acute dysentery.

Mentally, the use of ganja makes the consumer irritable and incapable of bearing contradiction. It sometimes produces insanity. It invariably produces laziness and unfits the consumer for doing any work which requires sustained efforts. Excited by his smoke, he may be induced to do something which others would not venture to do; but when the excitement is over, he becomes the most indolent of the indolent, and will not be roused to action till again excited by a fresh smoke of his favourite drug. Morally, it makes the man capable of anything, however heinous. He is generally in want, and when he has not his pice to procure his favourite ganja, he will commit theft, house-breaking, robbery, and every other offence.

46. In the above question, I have not dwelt on the effect of ganja-smoking in producing insanity, because I do not think moderate use of ganja tends to any great extent to produce this malady. Excessive use of it, however, is a fruitful source of insanity. I think, however, it is a mistake to ascribe to ganja the cause of insanity because insanes are found addicted to its use. Persons of defective intellect and idiotic turn of mind, through inability to control temptations, fall into evil company and contract the habit of using ganja, and thereby lose whatever intellect nature has endowed them with. It is not insanity for which ganja-smokers are noted. But irritability of temper, eccentricity and want of control over temper are their characteristic vices.

47. I do not think so. But, as in the case of alcohol and opium, a beginner learns the smoking of ganja from others with whom he comes into contact. There seems to be a greater chance of contracting this habit for young men whose parents happen to be addicted to this drug.

48. The above remarks apply also to this question.

49. I am not aware of such practice, and cannot, therefore, speak of the effects of such a practice.

Like other stimulants, the use of ganja, bhang and charas is supposed to cause temporary excitement, followed by a corresponding depression afterwards, and in the end to cause debility and loss of manhood, if not actual impotence.

50. The above remarks apply to this question also.

51. It is difficult to say whether a large proportion of bad characters are habitual moderate consumers of any of these drugs. It can, however, be asserted that ganja-smokers are, as a rule, regarded as of a disreputable character and as being persons to be avoided by all respectable gentlemen.

In civil and criminal courts, to shake the credibility of a witness, it is a frequent practice to ask him if he is a ganja-smoker. Similarly, in proceedings under the Code of Criminal Procedure for requiring a person to furnish security for his good behaviour, it often becomes relevant to enquire whether the person is a vagabond and associates himself with ganja-smokers.

52. Remarks made in answer to the preceding question apply in this case also.

53. I do not think in sober moments we have any reason to apprehend any violence from a ganja-smoker, even if he be addicted to an excessive use of the drug. But when under the influence of the drug, it is extremely dangerous to irritate him or contradict him, or do anything to provoke him.

If so provoked, he would be capable of committing the most heinous crime.

Several years ago there lived a man, named Radhai Haldar, within the Madaripur Sub-division of the Faridpur District. This man was an inveterate ganja-smoker. He had a son, named Prosonno, and a mother who was unable to move about on account of paralysis. Unfortunately the man lost his son Prosonno. He one day, after his son's death, held a fair of Trinath (see page 29, Bengal Excise Administration Report, 1874-75, where the details of this entertainment, which is also very prevalent in Dacca, Faridpur, and Backerganj, are given; the god is not *Srinath*, but Trinath, i.e., the Hindu Trinity of creator, destroyer and preserver) at his house. Having imbibed a strong smoke of ganja, he fancied that Trinath came to him and restored his son to life. He ordered his paralysed mother to get up and go to the place where the remains of his son Prosonno were burnt, and bring Prosonno home from that place. The mother being too much afflicted with her own disease, scolded her son, whereupon the son, with a wooden mallet, with one stroke completely smashed out her brains, and thus put an end to the life of the unfortunate woman.

This man was perfectly sane before this atrocious deed, and though he afterwards feigned madness whilst in jail before trial, he tried to commit suicide, which shows that his subsequent madness was feigned, and that, repenting of the horrible crime he committed, he tried to escape the gallows by himself putting an end to his existence.

54. I do not think so.

55. I have not heard of any such case. It is not easy to induce complete stupefaction by a small quantity of ganja or bhang.

56. See answer to question 29.

57. I cannot speak of charas but I have heard that even in this district there are persons who eat ganja with betel leaves or drink them like siddhi. Their number is, however, extremely small, and they consume the drug in this way in secret. It is said, however, that only those whom even an excessive use of ganja in the ordinary way does not satisfy take to the practice of eating or drinking the drug in secret.

58. It is, in my opinion, working well. But I am not prepared to say that it does not admit of improvement.

59. The expression "a maximum of revenue with a minimum of consumption" is, after all, I think, the most beautiful and succinct way of describing the avowed policy of Government in matters of excise.

I understand the expression to mean in the first place that consumption should be a minimum, i.e., it should be restricted as much as possible, without interfering with the legitimate requirements of the people, and without driving them to abandon one form of exciseable article and to take recourse to another more injurious form. In the second place the expression means that, subject to the above conditions of minimum consumption, and in our endeavour to bring about this desired result, the greatest possible amount of revenue should be raised for the State, regard being had to the fact that restriction carried too far tends to defeat its own object by driving people to illegal practices, such as smuggling, etc.

Let us now apply the above conclusions to the case of ganja. From these conclusions, we see that

we shall be justified in advocating restriction so long as we do not interfere with the legitimate requirements of the people, and so long as we do not incur any risk of illicit dealings or of driving people to have recourse to more injurious intoxicants. Revenue consideration is at once thrown out of our consideration. For, according to the theory I have enunciated above, it is merely an accident that Government derives a revenue from excise. The imposition of the duty is merely a weapon for restricting consumption.

Now, let us take up the first point we have to consider—legitimate requirements of the people.

I have already tried to establish that craving for ganja is an abnormal one. It is a vice contracted by evil company. It has no beneficial effects; on the contrary it is a most deleterious article to consume. The people have no natural longing for it. It is not a necessity with them. Only those who have created an artificial and unnatural habit for themselves find it necessary to continue the habit. Even in their cases jail reports show that it is not difficult to shake off the habit.

I therefore hold that the consumption of ganja ought to be absolutely prohibited if it be practicable to do so. I do not, however, think that that would be practicable. Total prohibition cannot be enforced without maintaining an army of detectives totally disproportionate with the object to be gained.

Let us, therefore, see whether further restrictions can or cannot be imposed on the consumption of the drug.

The total number of licenses issued for the sale of this drug in Bengal during 1891-92 was 2,578. The quantity of ganja consumed in that year was 5,677 maunds. The licenses are granted by auction to the highest bidders. The rates of duty imposed were R7, R6-4, and R5 for each seer of chur, round, and flat ganja, respectively. The rates at present are R8, R7-4, and R6, respectively. The total revenue derived from duty on ganja and license fees amounted in 1891-92 to R22,92,568, so that on the average each seer of ganja paid a revenue of R10 during the year. Of this amount, the duty varied from R5 to R7, so that a large part of the revenue has been derived from license fees. It proves also that the duty on ganja can be easily raised to R10 a seer. The effect will be a reduction in the license fees, without appreciably diminishing the consumption.

The fact that the abkars have been paying R10 per seer to Government whilst Government has imposed a duty on the drug not exceeding R8 a seer shows that the present rate of duty has no deterrent effect upon consumption. For if ganja is, from its own demand, capable of realising a price of more than R10 a seer, any duty less than that has no effect in decreasing consumption, whilst it is manifestly unreasonable to leave that portion of the revenue which is derived in excess of the duty to the uncertain contingencies of competition by the abkars at the time of granting the licenses by auction.

To restrict consumption, therefore, we must raise the duty on ganja far above R10.

The objections to suddenly raise the duty far above its present limit are—

- (A) It will drive people to resort to illicit dealings.
- (B) It will drive people to resort to other forms of intoxicants.

Under head (A) we have to contend with two difficulties—

- (a) The people may clandestinely grow ganja in their own premises.
- (b) They may smuggle it from the tracts where it is produced under Government supervision.

With regard to (a), it is to be observed that successful cultivation of ganja is an operation requiring a great deal of care, industry, and skill, extending over several months of the year. Surely it would be an unmerited slur on the detective ability of our officers to say that they would be unable to detect a man who would be carrying on an unlawful occupation, extending over several months of the year, and that not within his own house, but on open lands requiring to be watered by the rains and to be lighted by the sun.

That an illicit cultivation of ganja is now practically impossible is admitted on all sides.

Mr. Samuells, the Excise Commissioner of Bengal, says at page 36 of his Excise Administration Report for the year 1891-92 :—

“As to smuggling, any one who reads in that report the elaborate process by which ganja is manufactured from the green plant must admit that smuggling during cultivation would not be of much use, and the manufacture is not one of those operations that can be performed in secret.”

There is one point to which I wish to lay particular stress in this connection. The cultivation of ganja has been confined to the Rajshahi tracts for nearly half a century. Previous to that even there is no evidence to show that ganja used to be ever grown on a large scale in any other part of Bengal. It follows, therefore, that the cultivators of Bengal, even if they had ever cultivated ganja, have long forgotten the method of its cultivation, and would be unable to cultivate it now even if they be willing to do so. Further, it has been by no means established that the soil and climate of other parts of Bengal would be at all suitable to the growth of the ganja-bearing hemp plant. An experiment to cultivate the ganja at Sibpur under the scientific supervision of the Director of Land Records has by no means proved a success. It is also known that the presence of a single male plant is sufficient to destroy the whole crop of a field. Ganja experts would be necessary to root out the male plants before one can hope to successfully raise a crop of ganja.

Under these circumstances, I am of opinion that a further restriction on the use of ganja is not likely to lead the people to resort to illicit cultivation.

With regard to (b), I must say that petty thefts of ganja from the ganja mahals will always take place, whatever establishment we may keep to guard the tracts. But I think, with our detectives awake, any extensive smuggling would be simply impossible. Ganja is incapable of extensive smuggling. Its bulk is against such a practice. You cannot keep concealed within your clothes and bedding ten seers of ganja, though you would easily be able to so conceal double the amount of opium.

But what makes one particularly confident that there would be no danger of smuggling is the analogous case which we have of opium. Even with its increased price ganja would not be more

valuable nor more in demand than opium. So the incentive to ganja smuggling will not be greater than what at present exists with regard to opium. If, therefore, we are able to successfully cope with opium smuggling, there is no reason why we should not be able to do so with regard to ganja.

Mr. Money, in 1871, says on this point (*vide* page 31, Bengal Excise Report, 1870-71):—

“Mr. Money agrees with the Commissioner of Rajshahi in thinking that illicit traffic in ganja is not large. Indeed, there are difficulties in the way of anything like extensive smuggling not easily surmountable. Ganja, unlike opium, cannot be smuggled in small quantities, as this would not pay, while its pungent smell would be likely to lead to the detection of any large quantity.”

Coming to the second great objection (B), namely, whether, if the duty on ganja is greatly increased, people will not be driven to other forms of intoxicants, we see that the other possible intoxicants are (i) opium, (ii) tari, (iii) pachwai, (iv) country liquor, and (v) bhang.

With regard to opium, it is to be observed that even with its increased price ganja will be far cheaper than opium, so that no inducement will be offered to the people to abandon their habitual drug for one of a totally different character. His Honour the Lieutenant-Governor, in reviewing the Excise Administration Report for 1870-71, said:—

“The Lieutenant-Governor is struck by the circumstance that the consumption of ganja in the opium-producing districts (after allowing for the quantity exported from these districts to the North-West Provinces) is large compared with most other districts, although it is generally believed that the population of these districts have easy access to illicit and cheap opium. This points to a doubt whether opium and ganja are to any extent substitutes for one another in the tastes of the consuming classes.”

With regard to tari and pachwai, all that need be said is that it will certainly be a blessing if the people abandon the pernicious ganja and take to these totally inoffensive beverages.

The real point is whether restriction in ganja smoking will increase the consumption of alcoholic spirits. In this connection it seems to me to be necessary to notice two points—

- (1) Whether people will resort to drinking spirits if the price of ganja is, say, doubled.
- (2) Even if they do, whether the change will not be for the better.

In discussing point (1), we must divide the ganja smokers into two classes—(a) moderate consumers, and (b) excessive consumers. With regard to those who have become addicted to the drug to an excess, it is to be observed that, having become confirmed in the habit of consuming this drug, they cannot abandon it and take to another stimulant. The better off amongst them will pay for the increased price, whilst the poorer, who form the majority, will lessen their doses so as to regulate their habit according to the altered price of the drug.

The above remarks apply also to the case of moderate consumers. A person addicted to one form of intoxicant does not easily abandon it in favour of another.

In the case of moderate consumers, there is the further consideration that the amount which a consumer can at present afford to spend on ganja being only two pice or so would be

too small to satisfy their cravings by purchasing liquor. I have already stated that the quantity of intoxicating drug or liquor which these people, unrestrained by considerations of prudence and moderation, consume, is only limited by their means. So, if a ganja smoker now spends two pice a day for ganja, it shows he cannot afford more to spend on it. If he could afford more, he would have consumed more ganja. Further, if he be in a position to spend more, there is no reason why instead of spending it for ganja he would go and spend it for liquor.

There is another phase of this question that ought to be noticed. With the introduction of the Sudder distillery system into the greater part of Bengal complaints have come from several districts that the increased price of country spirits have driven people to ganja. Surely this shows that the duty on ganja ought to be raised in areas where the central distillery system is in force.

Complaints were, no doubt, sometimes raised in places where the outstill system was in force that the liquor was so cheap as to induce people to abandon ganja and take to outstill liquor. But this was never advanced as an argument for lowering the price of ganja. It showed the necessity of putting the outstills on a more satisfactory basis or of abolishing them altogether.

I have not yet considered whether a rise in the price of ganja will not drive people to more extensive use of bhang. I would consider it a blessing if such a change takes place. For bhang is far less injurious than ganja. It is doubtful, however, whether many people will take to bhang on account of a rise in the price of ganja. Bhang grows wild everywhere in Bengal; I should say on almost everybody's land. The excise officers cannot hold the owner of the land responsible for having in his premises bhang which he has not himself cultivated, but which has spontaneously grown in abundance on his land. Now at the present moment ganja selling at Rs 20 a seer and with bhang lying priceless at every man's door, the ganja revenue is daily increasing, and evidence is not yet forthcoming that the people have given up ganja smoking to any appreciable extent.

I maintain, however, that the excise from bhang ought to be placed on a better footing than at present. I have dealt with this subject in my answer to the next question.

Supposing, however, that a considerable artificial rise in the price of ganja would drive people to the use of country spirits, it by no means follows that the change would be at all an unwelcome one. No one has ever claimed for ganja higher virtues than for alcohol. The utmost that has been said is that ganja, like alcohol, is a highly concentrated food. So, if people abandon ganja and take to alcohol, I apprehend, the virtues of the two being the same, the change cannot be regarded as being one for the worse. I maintain, however, that ganja possesses not a single of the virtues ascribed to it. On the contrary, it produces the most injurious and demoralising effects. Taken in medical doses it may possess those virtues ascribed to it; but we know that the real consumers do not restrict their consumption to a medical dose. I think it worth while to make the following quotations in support of my views:—

(1) Page 16, Bengal Excise Administration Report, 1871-72—

“The Commissioner of the Presidency Division observes, and the Member in charge coincides with him in opinion, that the increase in the consumption

of ganja, *the most deleterious of the drugs to which the excise law applies*, is much to be regretted."

(2) Page 13, Bengal Excise Administration Report for 1874-75—

"There is reason to fear that the increase in its consumption of ganja during the year under report is to be attributed to some extent to increased difficulty of access to liquor which has been caused by the reduction in the number of shops. It has therefore been determined to increase the number of liquor shops again *as the lesser evil of the two*."

(3) Page 31 of the same Report—

The Commissioner writes—"It is probable that coolies returning from Calcutta, Assam, and elsewhere, bring back with them the habit of using ganja, and that others following their example, the evil spreads. I think it extremely desirable to check this habit at once decisively. The people of this part of the country are excitable enough naturally, and as they will make use of stimulants of some sort, country spirit is about as harmless a one as they could have, but ganja is not so, and I think it well worth consideration whether its consumption should not at once be checked by the imposition of a considerably heavier duty."

(4) Page 3, Resolution of Government on Bengal Excise Report for 1877-78—

"Ganja is doubtless *the most injurious of all the articles* which contribute to the excise revenue.

(5) Page 8, Bengal Excise Report for 1879-80—

"In trying to estimate the moral effects of the change of system, the Commissioner observes that there are two separate questions to be considered, *viz.*, first, whether it has led to greater consumption of spirits than would have taken place under the Sudder distillery system; and, secondly, supposing that there has been such an increase, whether it has not been counterbalanced by a decrease in the consumption of other, and in some cases more hurtful, liquors and drugs. On the first point opinions are divided, and we have not sufficient materials to form a definite conclusion. As regards the second point, there is no doubt that the outstill liquor being within easy reach of people, has proportionately diminished the consumption of tari, ganja and other more hurtful intoxicating articles, so that, *evil against evil*, the outstill compares favourably in this respect with the distillery system. The revenue has increased, and if the consumption has also increased it is at least balanced by the cheering fact that it has in some measure displaced the intoxicating drugs."

It may be asked that if your arguments are valid, why not recommend total prohibition, as your arguments apply equally to total prohibition as to partial restriction.

I think total prohibition is not feasible unless, of course, we are prepared to keep up an enormous establishment far exceeding that at present maintained. What makes total prohibition impossible and considerable restriction possible is that in the latter case, for each detective officer that we maintain, there are twenty or thirty licensed vendors whose motives for bringing to light smuggling and illicit cultivation are far stronger than those of the Government officials. Thus total prohibition will be possible if we are prepared to maintain a costly and unremunerative establishment twenty or thirty fold larger than we have at present.

My first proposal, therefore, is that the present

duty upon ganja should be considerably enhanced, say to Rs 25 a seer.

My second proposal is that there should be a minimum price fixed for the sale of ganja. Enforcement of minimum price is not difficult in the case of ganja, though it is difficult in the case of liquor. The utility of the minimum price is to prevent the lowering of the price of the article by the spirit of gambling which prevails so much amongst the vendors.

My next proposal is to greatly reduce the number of retail licenses which are at present issued for the sale of this drug. Multiplication of shops has a serious tendency in increasing consumption. Ganja, unlike liquor, is an article which will keep without deterioration for a long time. So there is no necessity to bring ganja within easy reach. If in a locality sparsely populated we have shops five miles apart, there is no reason why they should be closer in a place where there is a greater demand for the drug. The greater demand shews the necessity of discouraging the consumption of the drug in the locality rather than stimulating it by multiplication of shops.

My next proposal is that local option should be given in the selection of the site of a shop. The objection to it is that it may lead to the persecution of a minority by a majority. But I am of opinion that to throw difficulties in the way of indulging in ganja is not a persecution but a benefit. My last proposal is that duty on ganja should be paid at Rajshahi before the wholesale dealer is allowed to transport it to the selling district. This will indirectly tend to diminish consumption.

60. I am unable to answer this question. Only the Rajshahi officials can throw light on this subject from practical experience.

61. Charas is not prepared in Bengal, but is obtained from Amritsar and Allahabad.

62. The injurious effects of bhang are only a step lower than those of ganja. The production of bhang should be brought under proper control. For, unless this is done, the effect of raising the duty on ganja will also be partially neutralised. The difficulty about placing the cultivation of bhang under control arises from the fact that this plant grows wild everywhere, and no one can be held responsible for bhang grown wild on his land. The law, as it stands at present, prohibits the cultivation of bhang except under a license. Any scheme, therefore, for controlling bhang cultivation must first deal with the best means that should be adopted for extirpating the wild growth of the plant.

An attempt in this direction was lately made by the Commissioner of Excise; but Government has ordered that, as the measure involves a great deal of trouble and inconvenience, it should be given up.

One way of checking the wild growth of the plant will be to grant licenses for the sale of this drug more extensively, and thereby inducing the people to take their supply from the licensed shops. My idea is that all ganja licensees should be for the present allowed to sell bhang also, and also allowed to cultivate for himself the bhang that would be required for his licit trade. We will thus have a body of men throughout the country who will be able to assist our officers to detect unlicensed cultivation. Self-interest will also induce these men to extirpate as much of the wild plant as they can.

Then, I think, a provision should be made in the existing law, creating a legal presumption, to be held conclusive until the contrary is proved, that bhang plants found growing on land in the possession of a person have been grown and cultivated by him.

Such a provision in the law will be sure to induce people to extirpate wild bhang wherever found growing. To prevent hardship the operation of this provision may be brought into effect, say a year after it becomes law.

When by these means wild bhang will be extirpated, it will be easy for Government to bring the cultivation of bhang under such control as is now exercised with regard to the cultivation of ganja.

63. I have already indicated these in answers to questions 59 and 62. The improvements are to be effected not so much in the system, but in its working.

64. I have already stated that duty should be levied in the producing districts instead of in the selling districts.

65. I have dealt with this question at length in my answer to question 59.

66. The three different varieties of ganja must necessarily bear different rates of duty in proportion to the quantity of useless wood that each variety contains. The effect of imposing the same duty on all the three varieties will be to altogether drive out of the market the flat and the round varieties.

It is not, however, easy to say what proportion the three rates should bear to each other. The rates in 1892-93 were R5-6-4 and R7. From the current year the rates have been fixed at R6, R7-4, and R8. The effect of this change has been in this district to create a strong demand for chur ganja. It shows that it has now become more profitable to sell chur than flat or round ganja.

The three varieties of ganja that are ordinarily sold here have been carefully examined by me with reference to the woody substance that each variety contains. If chur ganja be taxed at R8, the round ought to be taxed at R7-8 and the flat at R6. These rates are practically the same as are now in force. Though these rates have stimulated an increased demand for the chur ganja, still, I think, the change is one for the better; for in the sale of the flat ganja much room exists for the commission of fraud from the large quantity of useless wood it contains.

It may not be out of place to note that it would be a distinct advantage if the ganja producers at Rajshahi were induced to prepare only one kind of ganja, the round variety. The frauds that are now committed can then be entirely removed.

67. None.

68. No prohibition to this effect exists under the existing rules in Bengal. I do not think any considerable number of the consumers consume their drug on the premises of the vendor. There is nothing like ganja or bhang dens existing in this province.

69. I do not think this is ever done. What is done is that the officials in their tours and in the course of their inspections enquire from the people if they object to any site where a shop has already been established. If the people have any objection to make, it is duly considered. Experience, however, shows that a shop already opened

in an objectionable place is difficult to be removed elsewhere. On this account I think local opinion ought to be consulted before the opening of the shop.

70. I have no experience of districts bordering on Native States.

Oral evidence.

Question 1.—I have been nearly four years a Deputy Collector. That is my whole service under Government, and it has been passed principally in Malda and a short time in Dacca. My age is twenty-eight.

Question 6.—The bhang jungle I have described is found near villages not at a distance from habitations. The largest patch I have seen measured 1 or 3 bighas. I have seen such a patch in the Malda district at a village called Makrampur. This was not cultivation, but spontaneous growth in uncultivated land adjoining the basti. The plants were two feet high. I have never seen the plant in such quantity in the flowering condition. I did not report this growth. There was then an Excise Commissioner's order to destroy wild bhang. I instructed the villagers to destroy the growth, but I don't know if that was done. I have not seen such a large quantity growing anywhere else. Elsewhere I have only seen it in small plots. I did not examine the plot I have described to see if other plants were growing with the bhang, but there probably were. I do not think I have ever stated the area. I inspected the growth generally from one or two directions without going into it.

Question 29.—My statement that dhatura smoking often leads to insanity is based on the general belief that dhatura is a very powerful drug. I have known one case of an insane who used to take dhatura, but I cannot say if the insanity and the drug were related as cause and effect.

Question 42.—My view that ganja is the most injurious form of intoxicant used by any people on earth is based on the official opinions I have quoted, which are confirmed by my own experience. I have seen people who smoke ganja in my travels in the districts, and I have always found it did them harm. But I have not made special enquiries into any particular case. My general observation is that ganja smokers are haggard, afflicted with asthma and bronchitis, and generally of evil repute. I cannot pick out a ganja smoker from his appearance. I cannot distinguish between a ganja smoker and a drinker of liquor. In the above statement of effects I am speaking of people whom I know personally. There must be one hundred of them, and I could name many. Most of them are excessive smokers, but there are also moderate smokers among them who have the diseases I have described. I cannot tell whether these diseases are more or less common here than elsewhere, but there are many who suffer from them without being ganja smokers. Some of the hundred, as many as half, are people whom I have seen frequently, residents of my own and adjoining villages, and places I visit frequently. I left my home two years ago. I cannot say that ganja and these diseases were related as cause and effect in any particular case, but the fact that the two are frequently found together leads one to entertain that belief.

I should say generally that ganja is more harmful than spirit. Spirit drinking, if kept within moderation, does not do any harm, whereas ganja does, even taken moderately. I have seen injury

result from excess in liquor, such as physical and domestic ruin. I have seen actually more cases of ruin from liquor than from ganja, but as the consumers of liquor are far more numerous the proportionate injury would tell against ganja.

Question 45.—I can now mention two or three cases in which ganja smokers have died of consumption and acute dysentery. These persons had both the diseases. Consumption consists in spitting of blood, a step higher than asthma.

Question 46.—My statement that the excessive use of ganja is a fruitful source of insanity is intended to be qualified by the following sentence. What I mean is that insanity is frequently attributed to the excessive use of ganja. I was much struck by the Lunatic Asylum returns about ganja, but I doubted if the histories of the insanes had been fully enquired into. I meet so few people insane, in whose case insanity has been caused by ganja, in the villages, that I wonder how so large a proportion of insanity in the Lunatic Asylum is ascribed to ganja. I have no other reason for doubting these statistics. I know parts of East Bengal and Malda. There are asylums to

my knowledge at Alipur, Berhampur, and Dacca. My knowledge is therefore limited.

Question 59.—My view is that we should try to raise the revenue on the drug rather by the duty than by license fees, because the latter are regulated by an uncertain method. As little as possible of the revenue should be derived from license fees.

I would ascertain local option through panchayats. Of course we are obliged to consult municipalities by Government orders. The panchayats which exist under the Chaudidari Act would answer the purpose. Their opinion should be furnished to the Magistrate, and the District Boards need not be consulted. There are three to five members in each village panchayat. Their opinions could not always be taken as representing the wishes of the people, but it could generally be accepted, and there is no better means available. The members of the panchayats are nominated by the Magistrate without consulting the villagers; but the law has been lately modified to admit of the Magistrate consulting the villagers. No one is, under present conditions, willing to serve on the panchayat, because it is an unpaid office involving considerable trouble.

65. Evidence of BABU BRAJA DURLABH HAZARA, *Kayasth*, Deputy Magistrate and Deputy Collector, Howrah.

1. I have had contact, but not frequently or very recently, with people using these drugs. I have little experience in charas.

2. Ganja, siddhi, and charas are the names current.

3. A stray plant here or there is found to grow spontaneously anywhere. I could not say where spontaneous growth is abundant.

10. So far as I know they are a special class.

16. I think ganja, charas and siddhi can be prepared wherever they may be grown.

18. I know ganja deteriorates by keeping. As it gradually loses strength in time, it may also lose it quite. How long it will keep good with ordinary care, I am not able to say. The causes of deterioration are damp and exposure; other causes might contribute. Any measures that will remove these causes may check the deterioration. I don't believe deterioration can be prevented altogether. A certain quantity of ganja was kept in the Howrah Treasury (of which I am in charge) for custody, when it was found to possess a strong smell. The ganja was cultivated at Sibpur. The officer from whom it was received reported that the ganja was of a good quality. It was examined after some time, and many officers declared that it possessed little or no narcotic property. It lost also the strength of its smell.

19. Ganja is mostly smoked. I have heard that it is sometimes reduced to powder or paste and eaten.

20. Up-country men are first-rate ganja smokers. Bengali Brahmins, who are cooks, will rank next. The former are, I believe, wholesale ganja smokers.

24. All classes and about 15 per centum of the people drink bhang. The practice of eating and drinking bhang extends all over Bengal. The practice is most prevalent among up-country people.

25. The use of ganja and bhang is, I believe, on the increase. People of slight moral strength

take to these temporary stimulants in order to muffle their anxieties or remedy their every-day physical complaints. They are deluded of course by a false hope. It is the intoxicating property which is in request.

27. (a) These are middle class up-country men who take to ganja as a luxurious stimulant and a successful time-killer.

(b) These are the tariwallas, carriage and cart drivers, coolies and durwans, and Bengali cooks. They want apparently to make their temper rough and rude. But they take to the drugs mostly whimsically. They begin in the company of veteran old smokers, and they keep it up as an incentive and support to their habits which are as a rule immoral.

30. Excessive smokers prefer solitude to smoke ganja. They will not suffer their chillum to go round. Moderate ganja smokers prefer to smoke in company. Ganja smoking is mainly confined to the male sex. Youth is the more proper time for it. Children of 14 or 15 have been found to smoke ganja. The habit is hardly given up so long as the lips are quick.

31. I cannot say anything specially about ganja, but judging from the fact that most intoxicants are easily liked and soon indulged in, I should say that the habit of consuming ganja is easily formed and hardly given up, and that there is a tendency in it to make the habit excessive.

32. I know only of one custom, which is a socio-religious one, in regard to siddhi. It is exercised on the Bijaya, i.e., the last or the parting day of the Durga Puja. The goddess Durga is worshipped for three days. On the morning of the fourth, the parting day, some puja is made also. She is given some "cold" food, after partaking of which in the morning she is supposed to leave the house of her father (the house of the worshipper) for that of her husband Siva. She is worshipped generally in an idol which is plunged in waters at evening. On her departure, and, specially and tangibly, on the destruction of her image, people are supposed to

be sorry (probably the ancients were sincerely sorry) and pensive, and they take to the mild intoxicant siddhi for gaiety and buoyancy of spirit. This is the religious origin of the custom which has now become more of a social nature. Friends gather together in the evening and they indulge in the siddhi drink. Females and males alike do it. Now-a-days the religious savour has evaporated from the custom, and people indulge, and they can do it only once in a year, in a mild intoxicant for the sake of its intoxicating power on the pretext of religion. The custom of drinking siddhi is not always essential on such occasions. There is only a small number of old men who take a sip of the drink or only touch it and put a drop of it on the tip of their tongue for the sake of observing the religious custom. The habit with the former class not unfrequently runs to excess; that with the latter is rather under

temperate. Men of weak principles have been found to acquire a habit from the occasional use.

33. The consumption of ganja and charas is always looked upon with an hateful eye, though siddhi is not so regarded. There is a native adage to the effect: "The use of siddhi improves the intellect; but the use of ganja ruins the man," which carries with it the sense of all men and women. The one public opinion, social and religious, against the use of charas and ganja is that it is bad. Ganja and charas smokers are always feared and regarded as destructive of sanity in the smoker and safety of others. They are always of a rude and rough mood. They are never trusted. Ganja and charas are consequently in disrepute.

40. I have often seen siddhi given to the horse as medicine.

66. Evidence of BABU NOBIN CHANDRA KAR, *Excise Deputy Collector, Bhagalpur.*

1. Serving in the capacity of an Excise Deputy Collector in this district for two years.

2. Yes. They are known as bhang, charas, and ganja; but charas is not smoked in this district. Ganja is again known as flat, round, and chur.

3. Only bhang grows wild in this district. In the beginning or middle of the cold weather, when water that collected over lands dries up, bhang plants begin to appear. In a couple of months time, when the plants attain a height of two to three feet, the bhang goladars of this district go out to the producing tracts with a *hukum-nama* and cut the plants, and let them lie on the fields to dry up. If the sun is very bright, the leaves dry up in one day, and then they are beaten with a stick, by which process the leaves are separated from the twigs. They are then gathered and cleared of dust, and bhang is formed.

4. Siddhi and bhang. Yes, they refer to the same plant.

5. Alluvial land has been found as the best soil for the growth of wild bhang.

6. Dense in places I have seen.

7. No cultivation of any kind of hemp plant.

8. No area under cultivation.

9 to 12. Not known to me.

13. The cultivation is, no doubt, restricted to certain districts, but not to this district.

14. Bhang is prepared in this district out of the wild plants. The average production is 200 to 300 maunds a year. It should be observed that all bhang that grows is not prepared, but only a part of it.

15. The method of manufacturing bhang from the wild plants has been fully stated in reply 3. When the plants have attained a height of two to three feet, they are cut and left to dry. When they are sufficiently dried, they are beaten with sticks by which process the leaves are separated from the twigs. The leaves thus cleared of dust and twigs form bhang. As regards bhang, the preparation is one and the same for eating and drinking. I have never known bhang being smoked.

16. (a) Prepared by bhang goladars in the fields.

(b) Yes.

(c) Can't say.

17. No special class. Those who generally deal in excisable articles do this.

18. Ganja and bhang have been known to deteriorate by long keeping. They dry up and lose their power of intoxication. They are said completely to lose their power in the sense that they fail to produce intoxication, but I hardly believe this. For one year or a year and a half at most they keep good. Dampness and length of time are the causes of deterioration. Can be kept long if protected from dampness.

19. No charas is consumed in this district. Rare case of ganja being chewed by ascetics has been known. Ganja taken in this state has caused vomiting in some cases. Oil is extracted from ganja and is used as medicine.

20. The labouring class generally consume ganja. Men of the gentlemen class also have been met with to smoke ganja. Women who have cut off all connections with worldly affairs and have taken to lives of austerity are to be classed among these.

21. To the consumer the distinction is unknown. He goes to the shop and asks for ganja. He never says that he wants this, that, or the other kind of ganja. All kinds of ganja are converted into chur by throwing away the twigs, and are sold to consumers. The retail vendors prefer chur to any other kind.

22. No charas is used in this district.

23. Not known.

24. Kayasths, Brahmins, Khatriyas, and Marwaris have been known both to eat and drink bhang. It is taken with food. But bhang is generally taken as a drink. Ice cream is also made of it.

25. On the decrease, not because people are giving up taking narcotics, but because they cannot afford to pay for such things. The statistics of the district for the last three years show this.

26. The number of habitual moderate consumers is the largest.

27. From the poor labouring classes who have to undergo hard manual labour and who are given up to habits of wandering.

28. (a) Four annas and four pice of ganja, and half chhattak and three pice of bhang.

(b) One bhari and two annas of ganja; one chhattak and six pice of bhang.

29. (a) Kheni or dry tobacco with ganja; and sugar and water with bhang.

(b) Some kind of scent (essence) besides dry tobacco with ganja; and milk and various sorts of spices, which are usually used with betels, in addition to sugar and water, with bhang. No use of dhatura with either ganja or bhang known. Its use by itself is known. The object of the admixture is to make it palatable and to impart to it more of intoxicating power.

No preparation as bhang massala.

30. Bhang is consumed in company, and so is ganja also. People of the gentlemen class who consume ganja do it in solitude. The consumption of ganja is principally confined to males, with whom the habit begins when adults. Females have also been known to smoke ganja. Females who have become widows when very young have been known to smoke ganja as a means to lead a pure life. Their idea is that by smoking ganja they would overcome their animal passions.

31. Yes; and when formed, it is very difficult to abandon it. There are cases of moderate consumers who have been moderate consumers all along, but moderate consumers have also become hard smokers.

32. Sivratri, Fagua, Dasahra, and Muharram. During all these festivals, with the exception of Muharram, the consumption of bhang also is very brisk. On the occasion of certain melas (fairs), the consumption of these drugs also increases.

33. On the occasion of Sivratri and Dasahra, the consumption of ganja and bhang is considered customary. Those who take them as mere observance of the custom are temperate, but many take such occasion as an opportunity, and indulge excessively in these drugs. Such occasions being rare are not likely to lead to the formation of habits, and the immediate effect of excessive consumption has been known to be injurious.

34. Consumption of bhang is not regarded with so much hatred as consumption of ganja. The public opinion is that ganja is generally consumed by the lowest class of the people. The use of all sorts of narcotics is held in disrepute, and this being one of them, is also held as such. No such custom as worshipping the hemp plant is known.

35. Hard ganja smokers say that if they are deprived of the use of ganja they will die. Moderate consumers say that they would perhaps take to some other narcotics. There is every likelihood of its being consumed illicitly. The prohibition can be enforced only by abolishing all ganja and its cultivation. The prohibition would certainly cause serious discontent amongst inveterate consumers, but its leading to political discontent would depend upon the number and nature of the consumers. Hard consumers will not be satisfied with anything but ganja. Moderate consumers say that those who can afford might take to drinking.

36. No.

37. No charas smoking here.

38. None.

39. No preparation of ganja or bhang is smoked here. Ganja by itself is smoked, but not so bhang.

40. Bhang is used in medicine by kabirajes. Oil prepared from ganja is also used as medicine by kabirajes. Bhang is given to cattle as medicine when suffering from cold.

41. (a) Bhang.

(b) Both ganja and bhang.

(c) Ganja, especially in damp climate.

(d) No other effect known.

As regards (a), it is the moderate and occasional use. As regards (b), moderate habitual use. As regards (c), moderate regular and not habitual use.

42. Moderate use has not been known to work any serious mischief in the system.

43. Yes.

44. (b) Bhang and ganja both refreshing. (c) Do not produce intoxication. (d) and (e) Do not allay hunger, but create appetite, especially bhang, and when taken occasionally. (f) An hour or so. (g) None. (h) Ganja produces uneasiness.

45. Bhang fails to create hunger, and ganja unnerves the system if taken habitually. Ganja would impair the constitution if the smoker does not get sufficient food to eat. No habit of laziness or immorality or debauchery is induced by moderate use of either ganja or bhang. Gives power to the memory. Moderate use does not produce insanity. No such instance known to me.

46. Excessive use of bhang or ganja benumbs a man's powers. He is quite unconscious of all that happens about him. Excessive use of ganja has sometimes resulted in the consumer's death from dysentery, and sudden excessive use has made men insane.

47. No.

48. Excessive use is also not hereditary.

49. No. Prostitutes do not use it for this purpose.

50. No. Excessive use of ganja has the tendency to check passion.

51 and 52. No. Those addicted to ganja smoking sometimes commit little pilfering if they cannot secure pice to pay for ganja. It is not taken as an inducement to commit heinous crimes.

53. No.

54. No. Bhang or ganja taken in any quantity never makes a man violent.

55. They do it sometimes with ganja mixed with dhatura. But liquor is frequently resorted to for such purposes. Complete stupefaction may be effected by the use of ganja in those who never used it. Opium is also sometimes mixed with it for the purpose.

56. Not known.

57. Ganja eaten very rarely. It causes throwing out.

58. Working well. May be improved.

59. Can't suggest any for the present.

60. Not produced.

61. No charas produced.

62. Cultivation of bhang should not be controlled. It would not be paying to cultivate bhang.

63. The only objection which I can see is that there is no use of manufacturing different kinds of ganja, such as flat, round, and chur. Ganja is ultimately to pass into human consumption, and for this purpose flat and round are all rendered into chur. The manufacture of flat and round ganja should be abandoned.

64. Exports to other province should be allowed.

65. I think it is fair.

66. There need not be different kinds of ganja. Let it be chur only.

67. No.

68. Yes; but consumers should not be allowed to smoke ganja in the shop, as this may lead to a large gathering of people in one place, and is likely to prove a source of nuisance. If each takes away ganja from the shop and consumes it in his own house, there is no probability of any one being annoyed.

69. The people of the neighbourhood are generally consulted, and I think this is sufficient. The general public need not be consulted.

70. Yes. Nepal ganja is smuggled into this district, and affects the sale of ganja here. This should be stopped. The bordering shops suffer very much from this.

Oral evidence.

Question 1.—I have been four years in the Government service, three years in this district, and one in the 24-Parganas. The last three years I have been Excise Deputy Collector in this district, Bhagalpur.

Question 3.—The wild hemp plant is generally found in alluvial lands (diyara) and other lands which are submerged in the rainy season. These lands comprise about one-fourth of the whole district. It comes up year after year in the same places, and I have frequently seen it. Such soil carries linseed, gram, mustard, and similar crops, and the hemp plant is found amongst the crop as well as on the boundaries of the fields. It comes up with the crops in almost the same quantity as the crop, and the people do not take the trouble to weed it out. I am not speaking of *churs*, but of land which is regularly cultivated after the water has subsided. It is in these lands that the plant is principally found. The crop is removed and the hemp plant is left standing and is allowed to ripen and shed its seed.

By "chur" I mean a large sandy area in a river bed which is not ordinarily cultivated. I have never seen the hemp plant on a *chur*. I have seen seven or eight fields of two or three bighas each in which the bhang was as plentiful as the crop sown. It is exceptional to find it growing so plentifully as this. The growth is scattered through the crop. I have seen these fields in the course of my journeys to inspect excise shops. It was not an express object of my tours to look for hemp plants, but I consider it my duty to keep this work in view. I did not make any notes of the places where I found the hemp growing. I keep a diary, but I am not sure if I ever mentioned the prevalence of the hemp plant in any place. It is not found in every village which contains land of the above kinds, but I should expect to find it in at least a half. The plant grows in the cold season, not in the rains. I have never seen it in the rainy season, even on the higher grounds. Nor have I ever seen it on lands which are not covered with water in the rainy season.

I have seen the hemp plant in the enclosures of houses, and these enclosures also are liable to submersion. I have never seen the plant growing in jungles, but I have seen it in fields where no crop has been grown, such fields being of the sort of land described. It is frequently found in the enclosures of houses. There are no orders in force

for the extirpation of the plant. There might be occasional plants in enclosures which have not been flooded, but there never is abundant growth in such places.

It would be difficult for people to extirpate the plant. They might clear it out one year, but it would reappear in the next. In the village of Kolgaon, the plant was once uprooted under the circular, but it has now reasserted itself. This is my only experience of the attempt to extirpate. There is in my office a list of other places in which extirpation was ordered, but I cannot say what has been the result of the attempt. In many cases also the plant grows over large patches of land, and the raiyat would not be able to extirpate it without great expense and labour. This difficulty would be felt wherever the plant grows abundantly. There is, in fact, an unlimited quantity of the plant in those portions of the district which I have indicated.

The people use bhang sometimes on such occasions as the Dassara. They say they buy it at the shops, but my belief is that they keep the wild bhang by them. The goladars have the right to collect the bhang everywhere, and the people never object to their taking it from private lands. The raiyats receive pay for gathering the plants for the goladars, but they do not sell it. The goladar, armed with a license, comes to me and informs me from what villages he intends to collect the bhang. I then give him a *hukumnama* authorizing him to collect it in the villages named. He proceeds to the villages and collects the bhang and brings it to the gola, which is in charge of the Superintendent of the distillery at Bhagalpur. From this gola the bhang is removed on licenses issued by the importing districts. Bhang is not cut in the presence of an Excise officer as laid down in the Excise Manual, because under the orders of the Board of Revenue it is not necessary for goladars of the producing district to be accompanied by the Excise officer, and the exporters from this district are also goladars of the district.

The exporters say that they bring all the bhang to the head-quarters gola, and I believe they are bound to do so. The bhang is collected by the Calcutta dealer who exports it out of the district. There are only two such dealers, both from Calcutta. There is a sale in this district of 5 or 6 maunds every year. This is a very small proportion of what is really used in the district.

There would be no difficulty in extirpating the plant in tracts other than those where the plant grows abundantly, but the tracts where the plant does grow abundantly are scattered all over the district.

The exports for the last five years have been as follows:—

	Mds.
1889-90	562
1890-91	335
1891-92	749
1892-93	598
1893-94	403

Nearly the whole of this went to Calcutta. About three-fourths of the bhang exported from this district last year was collected in Purnea. This is not always the case, and it depends on where the plant is growing in greater abundance, where the exporter will collect it.

67. Evidence of BABU RAJANI PRASAD NEOGY, Excise Deputy Collector, Mymensingh.

(With marginal notes by Mr. A. Earle, Collector of Mymensingh.)

1. Experience as Excise Deputy Collector for one year and nine months.

2. The definitions may be accepted. I have no experience about charas.

The definition may be accepted, but I may here note that seeds are found in all the varieties of ganja sold in this district. Flat ganja of small twigs is known as round ganja in this district. Charas is not used in this district. Bhang is also known by the name siddhi. Ganja is not generally known by any other name.

3. Bhang grows wild in many parts of this district. It grows abundantly in the Kishorgunj, Jamalpur, and Netrokona sub-divisions.

4. It is known by the names bhang and siddhi.

5. A dry climate, moist and low soil, and scanty rainfall are favourable to the growth of the bhang plant, but the plant grows on fertile soil if left fallow, whether it be high or low.

6. It is ordinarily scattered, but the growth is dense on low and moist soil.

7 to 13. There is no cultivation of hemp in this district. Hence I am unable to supply any information on these heads.

14. (a) and (b) Not prepared in this district.

(c) Almost all over the district for home consumption and for medicinal purposes. It is generally kept in small quantities, as the possession of more than a *poah* of bhang is illegal.

15. The preparations of bhang are always from (b) wild plants in this district. The branches of the plant are cut and dried in the sun. The detached leaves are then stored.

(A) Bhang is not generally smoked. It is only used as a make-shift when ganja is not available. The immediate preparations for smoking are the same as those for ganja. The bhang leaves are steeped in water for some time and then made into a ball by pressing them between the palm of the hand and the thumb. The ball is then enclosed in a tobacco leaf and cut into very small pieces. They are again pressed into a ball and again cut until the whole is reduced to a very fine powder. It is then smoked.

(B) Bhang is boiled with milk, sugar, and cocoanut to the consistency of a paste. It is then made into balls and taken on the occasion of certain Hindu religious festivals. Another preparation for eating bhang is made by frying the green leaves in ghi (clarified butter). The fried leaves are taken with sugar. Powdered bhang also enters into the constitution of certain sweetmeats, which are taken for producing intoxication.

(C) For drinking bhang is made into a solution with salt and water and sometimes with milk and sugar. Spices are also mixed with the above solutions.

Ganja is generally smoked. The immediate preparations for smoking are exactly those described for bhang. I am not aware of ganja being eaten or drunk.

16. Bhang is generally prepared by the people in their houses. It can be prepared from the hemp plant wherever grown. Ganja cannot be so prepared. I have no experience about charas.

17. There are no particular classes of people for making preparations of bhang, but the consumers make the preparations themselves (*vide* answers to questions 23 and 24).

18. Ganja and bhang both deteriorate in their intoxicating properties by keeping; but bhang, which has been in store for one year, is said to be best in its medicinal properties. They do not quite lose their effect in time. With ordinary care bhang keeps good for a year and ganja for a year-and-a-half. Exposure to heat and moisture are the principal causes of deterioration, as the resinous constituent is dissipated thereby. Bhang is also generally eaten away by worms whose growth it is rather difficult to prevent. The deterioration may to a great extent be prevented by keeping the drug in tin-lined boxes.

19. Ganja is generally used for smoking. On enquiry I have come to learn that ganja is sometimes eaten with sugar and sometimes drunk in solution with bhang, sugar, and milk, but such practices are extremely rare.

20. The following classes of the people smoke ganja. The proportion of each class is also noted against it.

	Per cent.
Boatmen and fishermen	25
Chandals	12
Malis	50
Dhobis	12
Bhadralok	6
Sudras or serving classes	25
Muchies	50
Banias	12
Bagdis	50
Sanyasis	95

21. Round ganja, as defined by Dr. Prain, is not liked in this district. The other varieties are used indiscriminately throughout the district.

I agree. A. E. 22. Charas is not at all used in this district.

23. Bhang is smoked very rarely by habitual consumers of ganja if the latter drug cannot be procured with the utmost endeavours. It is only so used by the lower classes of consumers who happen to be very poor.

24. The following classes (a) eat bhang—

	Per cent.
Up-country men	30
Bhadralok*	25
Artizans	50
Sudras	50
Cultivators	30
Banias	30
Bagdis	30
Fishermen and boatmen	30
Chandals	30

The following classes (b) drink bhang—

	Per cent.
Up-country men	40
Bhadralok*	20
Sudras	30
Artizans	40
Cultivators	30
Banias	30
Bagdis	30
Fishermen and boatmen	40
Chandals	30

* Middle classes.

The drug is taken all over the district. No particular locality can be mentioned.

25. The use of ganja is on the decrease, as will appear from the statistics of the trade in this drug in Chapter IV. The reasons for the decrease are (1) the increase in the retail price of ganja consequent on the increase in duty and license fees, (2) the gradual increase in the price of food-grains, which has the effect of leaving very little in the hands of the poorer classes of people for luxuries. The quantity of bhang consumed is also on the decrease. The reasons are—

- (1) The restrictive measures now being enforced to prevent the consumption of the wild drug.
- (2) A growing sense of aversion among the Bhadraklok classes* to the consumption of the drug.

It may be noted that there is practically no consumption of duty-paid bhang in this district. Although there are a few bhang shops in this district, there is hardly any sale in them.

		For ganja— For bhang—	
		Per cent.	Per cent.
(a)	.	70	10
(b)	.	12	Nil
(c)	.	13	40
(d)	.	5	50

For charas—No experience.

27. For ganja—

- (a) Malis, mehtars, chandals, boatmen, fishermen, carpenters, bagdis, banias, dhobies.
- (b) Ramants, sanyasis (religious devotees), bairagies, rowanis (or palanquin-bearers).
- (c) Zamindars and talukdars who have not the benefit of education and good society, and also young men who are just beginning to consume the drug.
- (d) Persons suffering from leprosy or acute rheumatism.

For bhang—

- (a) Up-country men of the higher classes.
- (b) Nil.
- (c) Bhadraklok classes.
- (d) Lower classes of Hindus, such as chandals, boatmen, malis, fishermen, banias, bagdis, etc.

The habits of life peculiar to the several classes of ganja consumers are—

- (a) All the classes enumerated under this head live by manual labour; moderate consumption of ganja enables them to sustain labour without fatigue.
- (b) The classes enumerated under this head are always exposed to the heat of the sun and the other inclemencies of the weather. An excessive consumption of the drug hardens them against these exposures. The religious devotees also use the drug for helping them in concentrating their minds.
- (c) The classes enumerated under this head try to beguile the tediousness of their

* Middle classes.

time by occasional moderate indulgence in the drug.

- (d) The sufferers enumerated under this class try to drown their pains in the intoxication produced by occasional excessive indulgence in the drug.

Bhang—

- (a) The up-country men use bhang as a substitute for alcoholic stimulants, which they abhor.
- (b) Nil.
- (c) and (d) The occasional consumers mentioned under these two heads generally indulge in the drug, and on occasions of certain religious festivals, such as Sri-panchami, Dashabara, Navami, etc. They also use the drug as medicine for all sorts of bowel complaints.

28. Ganja—

- (a) $\frac{1}{2}$ ani or $\frac{1}{32}$ of a tola, worth 2 pies.
- (b) 6 anis, worth about 2 annas.

Bhang—

- (a) $\frac{1}{4}$ of a tola, worth about $\frac{1}{2}$ a pice.
- (b) One tola, worth about 2 $\frac{1}{2}$ pice.

The consumers, however, rarely purchase the drug, as bhang grows wild in this district.

29. Ganja is taken with a dry leaf of tobacco, and when that is not available, with a small quantity of prepared tobacco. Dhatura is never mixed with ganja. Pepper and salt are ordinarily mixed with bhang and dissolved in water. It is also sometimes made into a paste with sugar and milk. The former preparation is generally used for medicinal purposes and the latter for intoxicating purposes. No such thing as bhang massala is known to me.

30. Ganja is generally consumed in company. It is consumed by the females to a very small extent. The consumption of the drug is almost confined to adults. Ganja is seldom, if ever, consumed by children. The prostitutes begin to indulge in the drug when they are advanced in years. Bhang is generally consumed in company. Its consumption is almost confined to adult males. Bhang is very rarely administered to children as medicine.

31. The habit of consuming ganja is easily formed, and it is difficult to break off the habit when once formed. The moderate habit generally tends to develop into the excessive. The same answers for bhang. No experience about charas.

32. Ganja is indispensably necessary for "Trailakhya Nath's Mela." This religious festival is observed by the lower classes of ganja consumers. The consumption on these occasions is rather excessive, but it is only the habitual consumers who indulge in the drug on these occasions, so no habit is newly formed. Bhang is consumed on Sivaratri, Maha Bishuva Sankranti, Narainpuja, Bijoya Dashmi, Sripanchmi, and Lakhipuja days. The use of the drug on these occasions is not essential. Bhang is also consumed when Gorakh Nath and Biswa Karma are worshipped. The use of the drug on these two occasions is essential. The consumption is generally temperate and does not lead to the formation of any habit.

33. The consumption of ganja is generally held in contempt. Public opinion (social) is unfavourable to the consumption of the drug. But when the consumption is solely for religious purposes,

it is regarded with indifference. Habitual indulgence in the drug makes a man useless and untrustworthy. It makes him irritable and hot-tempered. This is the reason why the use of the drug is held in disrepute. There is no custom of worshipping the hemp plant. Consumption of bhang is generally regarded with indifference. There is no social public opinion against it. There is a general practice of consuming the drug on the occasion of certain religious festivals, as noted in answer to question 32.

34. It would be a serious privation to sanyasis (religious devotees) as well as to boatmen, chandals, and other labouring classes to forego the consumption of ganja. The sanyasis or religious devotees are able to bear exposure to the inclemencies of the weather owing to the excessive consumption of the drug. They also consider the drug to be useful in concentrating their thoughts and subduing their passions. They would thus consider it a great hardship to be deprived of the drug. Men of the labouring classes who have contracted the habit of using the drug will not be able to work as hard as they are now able to do if they be not allowed to indulge in the drug.

The probable number of each class in this district likely to be affected by the prohibition is as follows :—

Sanyasis and bairagis 500 ; boatmen 2,000 ; Chandals 2,000 ; other labourers 5,000.

I think there would be no serious privation if the consumption of bhang is prohibited.

35. I think it would be feasible to prohibit the consumption of ganja and bhang by legislation. The drug would be consumed illicitly for a certain time, but such illicit consumption could soon be checked by our detective officers. The prohibition could be enforced by stopping all supply, and keeping a strict eye over illegal cultivation of the hemp plant. The prohibition would at first occasion serious discontent among the consumers, but there is very little probability of such discontent amounting to a political danger. Very few of the ganja consumers would betake themselves to alcoholic stimulants as they are much more expensive, but most will, I believe, begin to consume opium. I do not think the consumers of bhang will betake themselves to any other sort of intoxicants.

36. I do not think that alcohol is being substituted for any of the drugs—ganja and bhang.

I agree.
A. E.

37. No information about charas.

38. No difference.

39. Ganja is seldom eaten or drunk. Hence the effect of smoking ganja cannot be compared with either of eating or drinking it. Bhang is seldom smoked, hence no comparison is possible in this case.

40. Ganja is prescribed by Kabirajes for external application in cases of certain skin diseases. Bhang is prescribed for all sorts of bowel complaints and for debility. Bhang is used in the treatment of cattle disease.

41. Moderate habitual use of ganja is beneficial in its effects, as it gives (b) staying-power under severe exertion or exposure and alleviates fatigue. (c) It also acts as a preventive of fever and other diseases. It has the effect of alleviating pain due

to rheumatism and leprosy. Ganja does not act as a food accessory or digestive.

About 25 per cent. of boatmen, 10 per cent. of chandals, 10 per cent. of labourers, and almost cent. per cent. of sanyasis use the drug for some one or other of the purposes enumerated under head (b). No special classes can be mentioned who use the drug for any of the other purposes.

Moderate habitual use of bhang is beneficial in its effects—

(a) As a digestive.

(b) Nil.

(c) As a preventive of bowel complaints.

(d) Nil.

Bhang is used as a digestive (a) by about 2 per cent. of the Bhadrlok classes, and as a preventive of bowel complaints by men of all classes who happen to be subject to the malady.

42. Habitual moderate consumption of ganja produces cough and dysentery, so it cannot be pronounced harmless.

I agree.

43. Yes.

A. E.

44. The immediate effect of the moderate use of ganja and bhang on the habitual consumer is that it refreshes him. It does not produce intoxication. It does not allay hunger, but on the other hand sharpens the appetite.

The effect of ganja lasts for two or three hours, but that of bhang for about twelve hours. There are no after-effects. The want of subsequent gratification produces uneasiness.

45. Habitual moderate use of ganja impairs the constitution slightly, and gives the body a dried and parched appearance. It does not injure digestion, but if the habitual consumer does not get any ganja to smoke for some time he will almost lose his appetite. If the practice be continued for a long time, it may in the end cause dysentery and asthma, specially if the consumer does not take a sufficient quantity of milk. It impairs the moral sense to a certain extent and makes people reckless about telling lies. It makes people talkative and irritable. It does not introduce laziness or habits of immorality and debauchery. Habitual moderate use of ganja deadens the intellect to a certain extent, but does not produce insanity. Habitual moderate use of bhang does not produce any noxious effects, physical, mental or moral.

46. Habitual excessive consumption of ganja impairs the constitution, causes dysentery, bronchitis, and asthma in most cases. It does not injure the digestion. It deadens the intellect and produces insanity. The typical symptoms are that the person talks incoherently, sings songs, and passes sleepless nights. I am acquainted with the case of one Gopal Chandra Dom. He at first indulged in alcoholic drugs, and afterwards he took himself to ganja and turned insane. It must be here noted that there are cases in which persons suffering from mental anxiety or disease of the brain use the drug to alleviate their sufferings, but such cases are distinct from those in which the consumption of ganja is the immediate cause of insanity. I know also of the case of one Bangusheik, who has begun to consume ganja after he had been insane for a long time.

47 and 48. The habitual moderate use of ganja and bhang does not appear to be a hereditary habit, but the bad example sometimes produces evil effects, and the children of moderate consumers are found to indulge in the drug very early.

49. Yes, ganja is used as an aphrodisiac by prostitutes advanced in years. The moderate use for this purpose is not injurious. Bhang is not used for this purpose.

50. Excessive use of ganja as an aphrodisiac is more injurious than its use as a narcotic, as it produces great excitement for the time being, but causes dullness afterwards. I am not aware if the use of hemp produces impotence.

From my experience as a magistrate for eleven years, I am not prepared to say that there is any general connection between crime and the use of ganja, either moderate or excessive. My experience merely amounts to knowing of an occasional insane in jail whose madness was attributed to the excessive use of ganja.

A. E.

and bhang. There is no connection of moderate use of the drugs with crime.

53 and 54. No.

55. I do not know of any instance in which criminals, in order to further their designs, induce their victims to partake of ganja or bhang. Complete stupefaction can be obtained by bhang.

56. The effects of bhang used in (a) moderation, and (b) excess, are much intensified by admixture with sugar and milk. Tamarind destroys its effects. The effects of ganja are not much modified by the tobacco leaf with which it is taken. It only improves the flavour. I am not aware of dhatura being mixed with ganja or bhang.

57. I have no experience as to the effects of eating or drinking ganja.

58. The present system of Excise Administration

58 and 59. I would refer to my answer to question 35. From a financial point of view, I quite agree with the Excise Deputy Collector, viz., that Government is needlessly losing a source of revenue by employing middlemen.

A. E.

who is to issue ganja being out on tour. This may be obviated by permitting some responsible ministerial officer to issue ganja. The ministerial officer may be required to furnish a reasonable security. Another remedy would be to permit the goladars to pay at once the duty on the entire quantity of ganja imported, so that they might store and issue ganja just as they would do in and from a wholesale imported liquor shop. The wholesale dealers of ganja make a considerable amount of profit. Their profits often exceed 50 per cent. on their outlay. The system of having these middlemen can easily be abolished, and ganja sold from treasury like opium. The supervisor of ganja mahals can, with a small addition to his establishment, purchase ganja from the producers and send the drugs to all districts. The procedure for storing and issuing would be exactly the same as at present, and no extra establishment will be required. If the Government be prepared to make this outlay, I think a fair return will be obtained on it.

60 and 61. No experience.

62. The cultivation of the hemp plant for the

I think the eradication of the wild hemp is uncalled for, if not impracticable.

A. E.

production of bhang should be controlled. The only means of attaining the end seems to be to enact that it shall be the duty of every person on whose holding the plant may be growing to eradicate it. If such a law be passed, I think the wild growth of bhang may be effectually checked.

63. *Vide* answer to question No. 59.

64. No objections.

65. (a) The duty on bhang is small in comparison with the duty on ganja. One-fourth of a tola of bhang suffices to produce into intoxication. The duty on this quantity is three tenths of a pie. One-sixteenth of a tola of ganja would, however, produce the same degree of intoxication. The duty on this quantity is nearly $1\frac{1}{2}$ pie, so I think the duty on bhang should be ₹2 if the present rates continue for ganja.

(b) The taxation of ganja is low in comparison with country liquor.

(b) Any increase in the price of ganja would probably lead to increased consumption of spirituous liquor or opium.

A. E.

One pawa of country liquor of 20° under-proof is required to produce intoxication of the same degree as would be produced by $\frac{1}{16}$ of a tola of ganja. The duty on these quantities are 2 annas and $1\frac{1}{2}$ pie respectively. But as ganja is generally consumed by the poorer classes of people and liquor by the well-to-do, I would not, on the above ground, recommend any increase in the duty of ganja at present.

66. There should be different rates of taxation

I agree.

A. E.

for different kinds of ganja (such as the flat, round and broken ganja), as they contain different proportions of branches in them. These branches have to be rejected as useless at the time of sale.

No ganja from any other locality except Rajshahi is sold in this district.

I agree.

A. E.

67. No objection.

68. Ganja is consumed to a certain extent on

I agree.

A. E.

the premises of all license shops, but the shops do not appear to be nuisances.

69. Yes. The Excise Sub-Inspector and the

I agree.

A. E.

Excise Deputy Collector make enquiries on the spot. Local public opinion ought to be considered before opening any shop.

70. I am not aware of any smuggling of ganja from any Native State into this district.

Bhang consumed in this district is gathered from the hemp plant, which grows wild. No duty is paid in respect of the drug. There are a few licensed shops of bhang in this district, but there is practically no sale in them. So long as the wild growth of bhang is not checked by express legislation as suggested in answer to question No. 62, no revenue can be expected from bhang. There is very little to be said in favour of the drug as a narcotic. The intoxication produced lasts for a very long time, and complete stupefaction can be obtained by it. In the view of the above facts, it is not desirable to allow any untaxed drug to pass into consumption.

68. *Evidence of GHULAM LILLAHI, Excise Deputy Collector, Ranchi, District Lohardaga.*

1. I have been in the Excise Department for about seven years, and have acquired some knowledge of the matters in connection with the hemp drugs. The information which is given in my answers was obtained in the course of the discharge of my duties. But I do not remember the sources from which I got any particular information. I am not acquainted with the cultivation and rearing of the plants, and so the questions which are related to their cultivation are left unanswered. Questions requiring medical opinion are also left untouched.

2. These definitions may be accepted. The dry leaves of the hemp plant are known by the name of bhang in this district. Charas is not consumed here. The names of ganja are the same in this district as are given in the definitions, *viz.*, chipta (flat), gol (round), and chur.

3. In Monghyr and Bhagalpur districts the hemp plant, of which bhang is made, grows spontaneously. In the latter it grows abundantly. In this district, Lohardaga, one or two plants are occasionally found scattered here and there. In the Political States it is said ganja and bhang grow spontaneously. But I have never been in those places, they being beyond my jurisdiction.

4. The same names as are given in the definitions, *vide* question 2. They refer to exactly the same plants.

5. I am not fully acquainted with the conditions; but this much I have heard, that rich and damp soil is favourable for its growth.

6. In this district, scattered.

7. It is extensively cultivated in the district of Rajshahi, but I have no personal knowledge of the district.

12. No.

13. The cultivation of the plant for ganja is restricted to Rajshahi District. It is selected because the soil and climate is favourable to the growth of the plant. Rajshahi ganja is said to be less injurious than those grown in other localities.

14. In Monghyr and Bhagalpur bhang leaves are gathered and exported to other districts. Five or six hundred maunds are annually exported from these districts. The leaves are gathered from wild plants. No ganja or bhang plants are cultivated in those districts. In this district (Lohardaga) the drugs are neither cultivated nor prepared from wild plants.

16. Illicit preparation of bhang by persons in their houses was three times noticed in this district, and the offenders were brought for trial. Bhang can be prepared from wild plants wherever they grow. As regards the preparation of charas, I have no personal knowledge.

17. No preparation in the district. One or two cases of illicit preparation of bhang, in which the offenders were Koeris by caste, were brought to light. In one case the offender was by caste a Teli.

18. Charas is not consumed here. Bhang and ganja deteriorate by keeping. When they are two or three years old they are rejected by consumers, and the wholesale dealers destroy them. But in three years, if kept with ordinary care, they do not lose their effect completely. I think in five or six years the drugs lose their intoxica-

ting power in consequence of the glutinous matter being fully dried up. Deterioration can to some extent be prevented by keeping in air-tight boxes.

19. Charas not consumed here. Ganja is used only for smoking.

20. Ganja is smoked by Brahmins, Chhatris, Agarwalas, and Sadhus. Other classes, both Hindus and Muhammadans, also indulge in this, either alone or along with country spirits or other intoxicants. Kols (aborigines) are seldom found to smoke ganja. No female has ever been found to smoke ganja. Charas not used here. The proportion of the consumers of the people is not ascertainable.

21. Flat ganja is generally preferred to round in this district. It is said that the former is less heating than the latter. Round ganja is used in Panch Parganas in this district, where the habit and custom of the people are like those of the Bengalis.

22. Not consumed here.

23. Not in this district.

24. People of the same classes as smoke ganja (*vide* answer 20), and also Marwaris, drink bhang. Those who do not like to smoke ganja drink bhang only. Many persons use both ganja and bhang, the latter drug specially in hot season. Females also use bhang in the form of sherbet or majum. The proportion of the people is not known.

25. The use of ganja and bhang is not on the increase, as the following statistics of this district will show:—

Year.	Ganja.	Bhang.
	Mds. srs.	Mds. srs.
1888-89	52 23	3 9
1889-90	51 23	4 0
1890-91	55 1	2 32
1891-92	52 13	3 31
1892-93	50 11	3 11

26 and 27. (a) All classes mentioned in answer 20 who use the drugs, except the sadhus, are habitual moderate consumers.

(b) The sadhus only, who are very few in number, are generally habitual excessive consumers.

27. (c) and (d) Not ascertainable. The proportion is not known.

Ganja—	Bhang—
(a) 1 pice to 1 anna per diem.	1 pie to 1 pice per diem.
(b) 2 to 4 annas . . .	1 to 2 pice.

29. (a) Dry tobacco is mixed with ganja; and aniseed, black-pepper, and water with bhang for counteracting the bad effects of the drugs.

(b) Milk, sugar, cucumber and musk-melon seeds are mixed with bhang to produce a cooling effect. No bhang massala is sold in this district.

30. Generally these drugs are used in company. In solitude only when the consumer does not like to be exposed. Smoking of ganja is confined to the male sex only. Females sometimes take bhang. Children do not use any of these drugs.

31. The habit of smoking ganja is easily formed, but the habit of drinking bhang is not easily created. The habit of ganja-smoking cannot easily be broken off, but that of bhang can be

given up easily. The moderate habit in either case has a tendency to develope into the excessive.

32. In Durga Puja festival the Hindus, male and female, drink bhang. When going from one country to another (jatra), a little quantity of this drug is tied in cloth. Offering is also made of bhang and ganja to Mahadeo (Hindu god). The use of bhang is essential. It is temperate. It is not likely to lead to the formation of habit.

33. Ganja and bhang are used by the Hindus and low class Muhammadans. In case of Hindus there is neither religious nor social objection. In the case of Muhammadans the use of these drugs, though religiously objectionable, is tolerated by the class among whom it prevails. It is generally believed that ganja-smoking makes a man dull, and hence this drug is in disrepute among persons of higher order only. Hemp plant is not worshipped in this district by any class of people on any occasion.

34. I think there can be no privation to forego the use of bhang, as the habit can be easily broken off. But in the case of ganja, great inconvenience would be felt by the habitual smokers.

35. It would not be feasible to prohibit the use of any of these drugs, as in that case some people will resort to illicit practices. The prohibition would occasion discontent among the consumers, but there would be no political danger. If prohibition is enforced, most of the consumers will, of course, take to other stimulants.

36. I do not think that these drugs are to any extent substituted by country spirits.

37. Nil.—Charas not consumed here.

38. All the preparations have the same effect, except what is shown in answer 21.

40. The kabirajes sometimes use bhang in the preparation of their medicines. Bhang is also used as medicine for cattle.

43. Yes.

44. The immediate effect is intoxication on the habitual smoker of ganja. Both ganja and bhang are refreshing. They do not allay hunger, but on the contrary create appetite. The effect of ganja lasts ten minutes to one hour, and that of bhang three to twenty-four hours. The after effect is drowsiness and depression.

The want of subsequent gratification produces longing, but no uneasiness.

47. No.

48. No. The use of any of these drugs does not appear to be hereditary.

49 and 50. Not known.

53. No such case occurred here.

55. It is not known whether criminals stupefy their victims by these drugs. The drugs alone can stupefy persons if taken in excessive quantities.

57. Ganja and charas are never drunk in this district.

58. The present system works well, and no better method can be suggested.

62. The plant for the production of bhang should be cultivated under the same restriction as in the case of ganja, and the wild plants should be extirpated.

63 and 64. No objection.

65. In my opinion the duty on bhang and ganja is unreasonable with reference to each other and to alcoholic and other intoxicants, as the following will show: A bottle of country spirit worth one anna seldom intoxicates one habitual drinker; but $\frac{1}{4}$ tola of bhang worth a pice, and $\frac{1}{8}$ tola of ganja worth two pice, can do so.

66. Yes. Round ganja contains less and chur much less twigs than flat does. The woody portion does not produce intoxication, and is thrown away by the retail vendors. Hence it is necessary that there should be different rates of duty on different kinds of ganja. I have never seen foreign ganja. It is not used here.

67. The taxation should gradually be raised. The method of taxing ganja and bhang is in no way objectionable.

68. There is no such house in this district.

69. The wishes of the people and demand for the drugs are considered before a shop is opened. The inspecting officers hold local enquiry in such matters and report the result, before proposals for opening a new shop are submitted to the Commissioner of Excise. Public opinion should always be considered.

70. Only one case of smuggling ganja from Jashpur (P.S.) was detected in Pargana Biru some time ago.

69. Evidence of BABU SURESH CHUNDEA BAL, Baidya, Special Excise Deputy Collector, Howrah.

1. I have had opportunities of obtaining information on the subject as Collector.

2. Dr. Prain's definitions of siddhi, charas and ganja may be accepted as correct.

Flat ganja, seldom in use here, is called chipta ganja; round, as gol, and chur as chur or bhanga ganja. Siddhi is known as siddhi or bhang. Charas has no other local name.

3. The hemp plant grows spontaneously in the districts of Howrah, Hughli, Burdwan, Cuttack, Dacca, and Jessore. I have been told that it grows spontaneously in almost all districts of Bengal. It grows abundantly in the Rajshahi District.

4. It is known generally by the name of bhang plant. It is also called siddhi plant and some-

times ganja plant. The popular belief is that ganja and siddhi plants are different, but botanically they are the same plants.

5. I have seen the wild hemp growing in moist lands. I also saw it growing in some Bengal fruit gardens of ordinary Bengal level. The plant grows during or a little after the rainy seasons.

6. It is usually scattered.

7. The hemp plant is cultivated in the Lower Provinces—

(a) For the production of ganja in the districts of Rajshahi, Dinajpur and Bogra.

(b) Charas is not produced in Bengal. It is obtained from Mirzapur in the North-

Western Provinces and Amritsar in the Punjab. It is said that charas is imported from Central Asia.

(c) For use as bhang in Monghyr and Bhagalpur.

(d) No. The tract of land upon which ganja is cultivated is a circle with a radius of about sixteen miles. The extent of bhang cultivation is not fixed.

8. Neither considerable increase nor decrease.

9. I have heard that the ganja lands are ploughed and levelled by the months of Chait and Baisakh; that seedlings are raised during the rainy season, after which transplantation follows. By about Pous and Magh the plants flower, and in Phalgun the flowers are cut and manufactured.

10. No; they are of the same class as other agricultural cultivators.

11 and 12. No.

13. (a) Yes; to Rajshahi, Dinajpur and Bogra, because the soil of this tract is especially favourable to the growth of good ganja. The cultivation of ganja is not common to all districts.

(b) Damp lands not very low are especially suited for its cultivation.

(c) I do not think there is any district in Bengal where the cultivation of ganja would be altogether impossible.

14. (a) Yes.

(b) No.

(c) Yes.

Ganja is prepared in Rajshahi. Nearly 7,000 maunds of ganja are raised in a year. Bhang is raised in Bhagalpur and Monghyr.

15. Three sorts of ganja are in use in this province—(1) flat, (2) round and (3) chur. The dried flower-tops of the ganja plant being trodden upon by foot, assumes a flattened shape and the ganja thus manufactured is called flat ganja. When the flower-tops are not trodden, but rolled under foot, they assume a rounded shape and this gives rise to the name round ganja. Round ganja is the twigs and the flower-tops. Chur ganja is only the flower-tops without the twigs, and may consist of broken particles of both flat and round ganja. Siddhi is simply the dry leaves of the hemp plant. The preparation of charas is unknown in this province.

16. (a) People generally prepare bhang in their own houses for the purpose of drinking.

(b) Yes.

(c) I think ganja can be prepared from that particular variety of the wild plant which is known to the people as the ganja plant. I cannot say this about charas.

17. By the common class of cultivators who are taught the process of the manufacture.

18. Yes, they deteriorate by keeping, and quite lose their effect in time. They keep good for one year. Deterioration might be prevented by keeping the drugs away from a damp room, and closely compact in bales or bags.

19. Ganja and charas are used only for smoking. Ganja is sometimes used for medicinal purposes. It is then used externally. It is used to cure itch and stings of wasps and bees. It is then used with cocoanut oil and applied to the afflicted parts. The practice is prevalent in many villages of Bengal.

20. Ganja is extensively used by religious mendicants, especially by the up-country sanyasis

who frequent Bengal on occasions of religious festivals. It is also used by labourers, such as paliki-bearers, boatmen, carters, coolies, etc. Low class musicians sometimes use ganja, as ganja is said to improve their voice. Men of debauched character in towns, sometimes members of respectable families, use ganja. The use of charas is almost unknown in this district. There are only two or three shops with a very small consumption. The consumers generally are not low-class people, but often well-to-do.

21. Round ganja is prepared in these parts of the province, as the duty upon it is one rupee less than chur ganja. Practically chur ganja and round ganja are the same.

22. Foreign charas is generally used. It is imported from Central Asia and sometimes from Nepal.

23. I have never seen any bhang smokers. But I have heard that the poorest of the labouring classes sometimes substitute it for ganja.

24. (a) Bhang is very rarely eaten. The people of Behar sometimes eat it as majum, which is a sort of sweetmeat. But I have heard that the Hindu confectioners of Calcutta prepare sweetmeats slightly mixed with bhang on the immersion day of the Durga Puja festival. These are eaten by the native gentry. I am told it produces slight intoxication.

(b) Bhang is a favourite drink of the Uriyas and the up-country men, especially of the religious mendicants. A long stick and a wooden vessel for the preparation of the drink is the precious luggage of these people when they set out on a long journey. The lower class Bengalis are often habitually addicted to it. The upper classes sometimes resort to it as a digestive.

25. The consumption of all the three drugs is on the decrease. The reasons of the decrease are the general scarcity prevailing through the Bengal districts, the increased rate of the duty on ganja, a growing tendency of the people to use imported liquor in place of these drugs.

26. (a) 80 per cent. are moderate consumers.

(b) 10 per cent. are habitual excessive consumers.

(c) 5 per cent. are occasional moderate consumers.

(d) 5 per cent. are occasional excessive consumers.

27. (a) The habitual moderate consumers are chiefly the manual labourers and the agriculturists. These find the use of these drugs as refreshing, and capable of removing the bodily pains. The use of the drugs with such people is generally hereditary.

(b) This class of consumers are generally the sanyasis and mendicants, as also the spoiled children of the labouring classes. Excessive indulgence is chiefly due to bad companionship.

(c) These are chiefly poor people who sometimes enjoy the drugs as a luxury, such as coolies on their journey who get a good supply at times by the coolie recruiters.

(d) Some of the consumers belonging to class (a) and class (c) when they can afford to pay, indulge in the drug excessively to forget their miseries and troubles and to pardon them for excessive bodily labour.

28. (a) Four pice worth of ganja, i.e., about $\frac{1}{4}$ of a tola, is sufficient for a moderate consumer.

(b) Three annas worth of ganja is generally consumed by the excessive smoker.

The cost to the siddhi drinker is half that of the above cost.

29. Tobacco is generally mixed with ganja and charas to make the smoking milder. Bhang is generally mixed with sugar when used for drinking. The object is to increase intoxication. I have never heard of dhatura being mixed with any of these drugs. No particular preparation called bhang massala is sold in the bazar. But various kinds of spices sold in an ordinary spice shop are mixed with bhang to add to its flavour and perhaps to increase intoxication.

30. Ganja is generally used in company and siddhi in solitude; charas is also used both in company and solitude. It is confined to the male sex between the ages of twenty and sixty. Women of ill fame in rare instances resort to these drugs. Children never use these drugs, but young men of the age of sixteen or eighteen sometimes use it. Children sometimes use bhang as a medicine for indigestion or bowel complaints.

31. It is not very easy to contract the habit of smoking ganja or charas. But when the habit is once formed, it is very difficult to break off. The habit of drinking bhang is easily formed, but it is also very easy to give up this habit.

There is always a tendency to develop the moderate use of these drugs to excess.

32. It is customary with Hindus to use siddhi on the Bijaya Dasami day, or the immersion day of the Durga Puja festival. But the custom is not binding. The use in this case is temperate. This sort of use is not likely to lead to the formation of habit, and is not likely to prove injurious.

I do not know of any such custom with regard to ganja or charas.

33. The consumption of bhang is regarded by the public in an indifferent manner, but that of ganja and charas is looked upon with great disfavour. There is a public opinion in regard to the use of these drugs, and it is against the use of these drugs. The use of the narcotic is held in disrepute because in the long run it may work the ruin of a man.

34. It would be a serious privation to forego the use of ganja and charas to the smoker of these drugs. But the consumers of bhang may give up their habit without any serious inconvenience. Those who use ganja and charas consider the use of these drugs as necessary for giving them strength to carry on their several professions. It has also been practically found that if they are not allowed to use these articles for some length of time, they lose their usual health. I cannot say definitely the probable number of each class.

35. The use of charas may easily be dispensed with, but it would not be feasible to prohibit the use of ganja and siddhi. I think the drug will be consumed illicitly. I do not think prohibition can be enforced in any way. Legislation would be very hard upon the consumers who would be quite useless members of society. The prohibition would certainly occasion discontent among the consumers, but it won't be so serious as to amount to a political danger. The prohibition is certainly to be followed by recourse to alcoholic stimulants, or to the other drugs such as opium.

36. There is every reason to think that alcohol is to a certain extent being substituted for hemp drugs. Using alcoholic drinks is considered to be more respectable than smoking ganja or charas or drinking bhang. The use of ganja compels the consumer to use many other things such as milk, while the use of liquor does not require any other thing. Hence drinking liquor is considered to be more easy than consuming ganja, charas or siddhi. By making local enquiry, I have found that several consumers of hemp drugs have taken to drinking alcohol.

37. The effects of charas last for shorter time than those of ganja. The intoxication from charas lasts for about an hour. The smoker feels a kind of dryness of the tongue and heaviness of the head. He requires something to lean his head against. Ganja smoking affects the brain gradually. The effects are not so acute as those of charas, and last for over two hours.

38. No.

39. I have never heard of any preparation of ganja or charas being eaten or drunk. Siddhi drinking is certainly less injurious than ganja or charas smoking. The latter injures the brain and dries up the whole constitution, while the former is comparatively harmless.

40. Bhang is often prescribed by kabirajes and doctors. The qualities of bhang are mentioned in Hindu books of medicines. But there is no mention of ganja or charas in those books. I have never heard of any of these drugs being used in the treatment of cattle disease.

41. (a) The moderate use of bhang may be beneficial in its effects as a digestive.

(b) Said to be so by the habitual consumers.

(c) I have never heard of this.

(d) Not known.

The lower classes who have to work hard and the religious mendicants who have often to bear fatigue and exposure, use the hemp drugs for the purposes indicated above. A beneficial effect can only be produced by a moderate occasional use.

42. The moderate use of these drugs (ganja and charas) is not harmless. The health of the consumers suffer considerably as compared with the health of the people who do not touch the drugs.

43. Yes. But they generally get an irritable temper.

44. The moderate use of any of these drugs produces more or less intoxication on the habitual consumer immediately after taking the drugs. It is refreshing to some extent to the habitual consumer. It produces partial intoxication. Ganja and charas allay hunger. Siddhi creates appetite. The effects of ganja and siddhi last for about one hour. The after-effects are to make the head dizzy, and to weaken the constitution. The want of subsequent gratification produces a great deal of uneasiness.

45. Excepting siddhi, the other two drugs certainly produce noxious effects—physical, mental, and moral. Ganja and charas impair the constitution. They make the consumers lean and dried up. The consumers can often be recognised merely by their external appearances. Ganja and charas injure the digesting power and cause loss of appetite. I have heard that ganja brings on dysentery, but I have not heard of bronchitis or asthma being caused by it. The use of ganja impairs the moral sense, and induces habits of immorality and debauchery. The use of ganja

weakens the intellect. I have heard of people becoming temporarily insane by the excessive use of ganja, but I have not personally seen any man who has become insane on account of excessive indulgence in ganja. The use of ganja is said to produce temporary insanity which can be cured by taking immediate steps and by restraint from the use. The symptoms may be re-induced by using the drug again. The typical symptoms are (1) the man becomes boisterous, and (2) also gets a menacing look. I have not seen any insane person confessing the use of the drug (ganja).

I can't answer the last two paragraphs of this question.

46. The remarks in answer 45 apply to this question also. This line between habitual moderate use and habitual excessive use is very thin.

47 and 48. No.

49 and 50. I have heard that persons who use the drugs habitually do not often get children.

51. A large proportion of bad characters use ganja. People who commit crimes harden themselves by the use of ganja.

52. The same remarks as in 51.

53. No.

54. Yes. Criminals who are addicted to ganja, fortify themselves to commit a crime by taking ganja.

55. I have heard that a class of criminals once infested the Grand Trunk Road, who used to induce their victims to take these drugs in order to rob them. Their existence in these days is not known.

To effect a complete stupefaction, the drugs are made powerful by an admixture of the dhatura seeds.

56. I have heard that the veteran ganja smoker sometimes uses one or two seeds of dhatura to improve the strength of the drug. I do not know whether any of the hemp drugs is mixed with dhatura for administration to others.

57. I have never heard of ganja or charas being eaten or drunk.

58. The present system of Excise Administration in respect of hemp drugs appears to be working well. But I still think it is capable of further improvement.

59. The duty on ganja, charas, and siddhi is still capable of being raised. If, with the increase in duty, there be appointed a good preventive force to detect the illicit cultivation of the drugs and smuggling, there will be the highest revenue obtained, and there will be the least consumption.

60. I think the cultivation and preparation of ganja are sufficiently controlled.

61. Charas is not produced in this province.

62. The cultivation of the hemp plant for the production of bhang should also be controlled. Such control would be feasible. It is already an offence under the law to grow the hemp plant. Where it grows wild the owner of the land may be ordered to extirpate the plant. Government alone should cultivate the plant where the soil is favourable.

63 and 64. No objection.

65. (a) Bhang appears to be not adequately taxed.

(b) With reference to alcoholic or other stimulants, the tax upon ganja and charas appears to be sufficient, but it is still capable of further increase. There would be the highest revenue and the lowest consumption if the tax be raised.

66. Yes. There should be different rates of taxation for different kinds of ganja. Broken ganja should have a higher rate of tax, as there are no twigs attached with the ganja. Flat and round ganja may have the same rate of tax. Other ganjas, if inferior in quality, should be lowly taxed.

67. I do not see any objection to the present method of taxing.

68. The drugs are not consumed on the premises of the houses licensed for sale. Such a house would be a public nuisance.

69. Yes. Under rules the opinion of municipalities is asked and local enquiries are held by excise officers when new shops are opened. Local public opinion should be considered.

70. I do not know of any facts regarding the importation or smuggling of hemp drugs from Native States. I think duty is really paid in respect to the ganja and other hemp drugs used. I do not think that untaxed drugs are used.

70. Evidence of BABU BRAJENDRA NATH RAY, Excise Deputy Collector, Puri.

Oral Evidence.

I have been three years in the Government service, and have been Excise Deputy Collector of Puri since December 1892. I have the whole excise of the district. I am stationed at the headquarters, but go out on tour. I have a minimum touring period of sixty days, but was eighty days on tour this season. I do not go to the States. I have only been one day in one of them.

There is considerable consumption of ganja and bhang in the Puri district. In the past ten months of 1893-94 there have been over 72 maunds of Rajshahi and over 17 maunds of Gurjat ganja consumed in the district. Nearly the whole of the Gurjat ganja is consumed in the town of Puri and comparatively little Rajshahi. The total consumption of ganja in the town is about two maunds per month. The greatest consumption of Gurjat ganja is in the pilgrim months of March and July.

There is smuggling of Gurjat ganja into the district of Puri to a very large extent; but we have not caught many cases. It is chiefly in the Khurda sub-division, which borders on Rampur and Naiagarh States. The average of cases detected in the district for the last seven years is ninety per annum. The average for the last four years is sixty-five. This is in my opinion about sixty per cent. of the cases that have occurred since the withdrawal of the prohibition against import. We have not succeeded in detecting many cases among the pilgrims. It is also difficult to detect cases of bringing in small quantities for use, and there are few cases of smuggling for profit. I believe that the most of the smuggling is by Khurda or Puri people and not by pilgrims: I believe that because we have discovered few cases among the pilgrims. I do not think that Mr. Taylor's statement is correct that only about one-twentieth of the cases are discovered. Cases discovered are now less numerous than in former

years, but then the withdrawal of the prohibition against import will have reduced smuggling.

The statement I have prepared shows that the average quantity found in each case was three-quarters of a seer. The total average amount seized per annum was fifty seers taking the total of the cases in which the amount was recorded. I believe that formerly twenty maunds were smuggled in, and the detections were therefore only one-sixteenth of the cases. But I think we are better now as the establishments are improved. I think our success is much greater. I see that in 1889 only forty-five seers were seized, which is near the average. But I think that we have got hold of a greater proportion of cases now; and that our figure for seizures, though not higher, represents a far higher proportion of the cases that occur. Of course my figure is only a rough estimate; but I adhere to it that we catch fifty or sixty per cent. of the cases that occur. I do not think that the smuggling now under the present system exceeds five maunds in the year in the Puri District.

There is no bhang used in the Puri District. No licenses are given. The Gurjat ganja is used as bhang. It is not much smoked in Puri town. The Pandas and others drink the stuff. It may be smoked near the border to a considerable

extent where the people get it from the States. There were bhang licenses before. When I speak of Gurjat ganja being drunk I speak of the licit ganja. I have been told that Gurjat ganja is smoked only when Rajshahi ganja is not available in the place. I have myself never seen ganja smoked, so as to know what was being smoked, except in shops where Rajshahi ganja alone was sold and on one or two occasions when I was making experiments as to the effects of ganja. Therefore I know personally nothing of the effect of the smuggling of Gurjat ganja on the use of the Rajshahi stuff. But if what I have stated above as being told to me is true, the effect is little.

I am told that in the years when there was no bhang and Gurjat ganja was also prohibited, some of the Pandas took Rajshahi ganja in their drink. But the great bulk of what they use must then have been smuggled in. They are large consumers. Very nearly the whole of the licit Gurjat ganja imported into the district is consumed in Puri town as drink.

The Rajshahi ganja is said to be weaker than the Gurjat ganja. I asked some old smokers and licensees who say that the Gurjat ganja is stronger than the Rajshahi and produces dysentery and bowel complaints. I have no knowledge of this subject apart from this.

71. Evidence of BABU ROY BRAHMA DUTT,* *Kayasth, Excise Deputy Collector, Darbhanga.*

1. Being a resident of Behar, and having served as an Excise Officer in all the districts of the Patna Division, I have had an opportunity of obtaining information regarding matters connected with hemp drugs in regard to which my answers are framed.

2. The three narcotic articles are locally known by their district names of ganja, charas, and bhang respectively; the last being recognized also by the names subji, patti, buti and thandai. The definitions of the first two of these three articles, as given by Dr. Prain, may be accepted for this province; but that given for the third does not wholly apply to it, because by bhang the people here understand leaves of bhang plant only and not those of ganja plant also.

3. I know by personal observation that the hemp plant grows wild in Saran, Champaran, Darbhanga and Muzaffarpur, in which last it does abundantly.

4. Bhang and phul bhang are the names of the plant which grows spontaneously in those districts. Yes, they refer exactly to the same plant.

5. I have ascertained from a work on materia medica in the Persian language that the plant grows both in plains and mountainous lands.

I understand by experience that it grows spontaneously in *Balsumbhi* or *Balsundar* (mixed or sandy soil) land; and it is, I infer, from the character of this kind of soil, that both the ganja and the ganja-producing tract in Rajshahi are designated *balu-char* (*balu* meaning sand, and *char* meaning alluvial land); and also in saliferous soil, which is deducible from the fact that the plant grows wild more or less in all the salt-producing

districts in this division and in those of Bhagalpur and Rajshahi and in several such other districts in Bengal. It requires moderate climate for its growth; extreme moisture is prejudicial to it. It does not thrive in marshy land, nor does it require too much rain. High sandy and saliferous soil is necessary for its growth.

6. Yes, the growth of the wild hemp is ordinarily dense.

7. There is no licensed cultivation of the hemp plant in this division, nor does any illicit cultivation of it, as far as I know, now exist in any of its districts.

8. See the above.

9. While employed as a Special Divisional Excise Inspector in Behar, I detected a number of instances of unlicensed cultivation of bhang and ganja in some of the south Gangetic districts in which, I know by experience, the plants do not grow wild. In Gundi, in the Shahabad District, I found bhang cultivated in poppy fields. This was in the month of January 1882. The plants were seen scattered but growing promiscuously with poppy on the ridges and in the beds prepared for the latter. They looked very healthy, because they were regularly watered along with poppy plants, which would not otherwise thrive from the nature of the soil of that district. The drug produced in Gundi was, I was informed, reputed for its strong narcotic effect, and it was so because the hemp plants were nurtured and allowed to grow with poppy plants. In the following month I discovered a number of cases of similar cultivation

* With marginal notes by Mr. H. C. Williams, Collector of Darbhanga.

both of bhang and of ganja in mauza Bilap in the district of Patna. There they were found growing in poppy fields and also in small beds prepared for them in a garden, and on both sides of a raised aqueduct made for conducting water from a well to adjacent fields. These plants also seemed to have been regularly watered to help their growth. The reason why the hemp plants in this part of the country, whether growing wild or illicitly cultivated, as also those in the Nepal territory, do not produce ganja such as that imported from Rajshahi, is, I apprehend, that the people here do not know the secret that the formation of seeds in female plants is prevented by the destruction of all the male plants,* nor are there "Parkhias" or ganja doctors in these places, who can distinguish the male plants and destroy them in favour of the ganja-producing plant.

A single plant growing wild or cultivated has sometimes been found producing ganja; and this must be, I think, owing to an absence of male plant from the locality.

An illicit cultivator of one or two plants of ganja adopts (though very rarely, and never detected) a method illustrated below, which not only cloaks his illicit proceedings, but also makes the plant yield, it is said, ganja of a superior quality. *Illustration.*—When a ganja plant grows about a foot high, it is concealed with an earthen pot placed over it with its mouth downward, and raised about 8 or 9 inches high above the ground, being supported on pegs fixed in the ground, to which it is strongly fastened with some string. Thus some space is left between the pot and the ground for admission of air and light necessary for the growth of the plant. The ground round the plant is softened, weeded, manured, and watered. Thus reared with care, the plant, of which the growth is confined within the space of the pot placed over it, with its flowers and branches spread around, takes a round shape like that of a cabbage flower, and when mature, is cut, dried and preserved for use.

The cultivation of ganja plant is confined to a certain tract of land in Rajshahi designated Balúchur, and is carried on under excise surveillance. Fields for it are renovated every year by the addition of fresh earth, kept *chaumas*, i.e., tilled occasionally during the four months of the rainy season, weeded and manured with cow-dung, oil-cakes, ashes and house refuse. Ganja is transplanted. For this sake, in the month of August, seeds are sown broadcast in the nursery in which they sprout in a week, and after the seedlings thus reared have gained strength which takes not less than a week or two, they are transplanted in the field prepared for them as described above. If the rains are heavy in August, the transplantation takes place in the month of September. In order to prevent the formation of seeds in the female plants, it is necessary to destroy the male plants. There are experts in Rajshahi called "Parkhias" or ganja doctors who can distinguish one from the other even in their early age. These men are employed to uproot the latter and this is done twice or thrice till all such plants have been weeded and destroyed. The ground is again manured with cow-dung and oil-cakes and the stems of the plants cleared. Noxious plants are constantly uprooted until the ganja plants mature. In December when the plants attain the height of four or five feet, the ground is irrigated, and ridges are opened and manured again with oil-cakes, ashes and house re-

fuse. In January or February the crop is ready and the harvest commences.

10. Ganja is not cultivated in Behar. In Rajshahi the ganja cultivators, I am informed, are of the same classes as other cultivators.

11. Ganja is not cultivated in Behar, nor are plants raised from the seed of the wild hemp.

12. I have no reason to suppose that the (so-called) wild hemp is anywhere cultivated specially for the production of ganja. I have already stated that there are no "Parkhias" or ganja doctors here; and as male and female plants both grow promiscuously wild in several districts of this division, ganja is not produced here—so much the better for the excise revenue derived from this head here.

13. I have already stated that ganja is not cultivated in any of the districts in this division. In the districts of Champaran, Saran, Darbhanga and Muzaffarpur, there are high sandy lands whereon hemp plant grows wild, and ganja can therefore be produced without difficulty in these districts; and in the south Gangetic districts in which the plant does not spontaneously grow, ganja can be produced, but with some difficulty and at an unusually large outlay of money.

14. (a) Ganja and (b) charas are not manufactured in any of the districts of the Patna Division.

(c) Yes; bhang is manufactured by private individuals partly for their own consumption and greatly for their cattle. There are no statistics in the office as to the quantity of bhang gathered annually by the people; nor is the drug openly manufactured and gathered by them from which an approximate idea of the quantity so gathered could be formed. It is, however, presumed that 200 maunds of the drug is annually manufactured and stored in the district, viz.—

	Maunds.
In Samastipur (where the plant grows more abundantly than elsewhere) ...	100
In the remaining part of the district...	100
TOTAL	200

15. Ganja and charas are used for smoking only, and though they are not manufactured in this district, I know how each is manufactured.

The harvest commences, in January or February when the ganja is ready. The plants are cut and divided into four or five parts and exposed to the rays of the sun until the leaves wither, when the stalks are spread on mats and prepared into flat and round ganja; the first is so called owing to the ganja assuming a flat shape from being trampled upon while being dried, and the second, from the shape which the rolling of each branch and the simultaneous removal of the thickest portion of wood give it. The third kind of ganja is chur or rora. This consists of the fragments of the leaves and flowers. (Chur in the vernacular means fragments).

Charas is prepared in up-country and in Nepal. In January when resin exudes from ganja flower and leaves, the people engaged in the business go early in the morning and walk in their ganja fields with leathern garment on, and while they move amidst the dew-bespangled plants, the resinous exudation sticks to their garment which is daily exposed to the rays of the sun and dried. This process is repeated for several days till the garment is thickly covered with this substance which is

* Dr. Prain in his definition of bhang and ganja states that male plants are destroyed; while people from whom I have learned say that female plants are destroyed.

subsequently scraped from it and gathered. This is called charas.

16. Yes; bhang is prepared by the people generally in their houses. Yes, it can be prepared from the hemp plant wherever grown.

Ganja and charas, as far as my experience goes, cannot be prepared from the wild plant wherever it may be grown.

17. Ganja and charas are, as far as I know, prepared by the cultivators in the place where the plant is cultivated; but the preparation of bhang is not confined to any particular class or classes of the people. Wherever it grows wild, any one, who likes, prepares it for his use.

18. As charas is not consumed in this district, I have no idea as to how long it can be kept good and when it deteriorates. But, as it is a resinous substance, I think it can be kept good for a long time.

Ganja begins to deteriorate after two years and loses its effect after three years. Bhang begins to deteriorate after one year if not carefully kept, and if carefully kept, it loses its effect after two years. These drugs deteriorate soon if kept in a damp and dark place. Insects eat them up.

19. Ganja and charas are used only for smoking.

20. Charas is not consumed in this district.

The use of ganja is not confined to any particular class or classes of the people, nor to any particular locality or localities. It is chiefly consumed by Bairagis (religious ascetics), sanyasis (religious mendicants) and various other Hindu fakirs; and by such people or class or classes of the people who totally or of whom most abstain from drinking tari and spirit (as forbidden drinks); and also by lower orders of the people.

21. All flat and round ganja transported from warehouses to retail shops are reduced to chur before they are sold. There is no difference in the narcotic powers of these three descriptions of ganja, and therefore one is not preferred to the other for smoking.

22. Charas is not manufactured in this or in any other district in the division, nor is foreign charas imported and consumed in this district.

23. As a rule, bhang is not used for smoking. Very poor people addicted to the use of ganja, if unable to obtain it, reluctantly gratify their desire for smoking by having recourse to bhang. Bhang-smoking is rare and not confined to any particular locality or any particular class of people. The smoking of bhang produces severe headache.

24. Bhang is consumed in various forms which will be described further on. The consumption of the drug as an intoxicant is very limited in this district and is not confined to any particular class or classes of the people, nor to any particular locality or localities. It is chiefly consumed by

Hindu mendicants, ascetics and high classes, who abstain from using tari and spirit, except Soti Brahmins who, without exception, do not use any kind of intoxicating drug. Of this limited consumption of the drug, a large portion is shared by the Samastipur Sub-Division in which the population of Rajputs, Bhuin-bárs, Sakaldipi and Kámkúbjya Brahmins is considerably large; a little portion by the Darbhanga Rosera and Madhobuni Municipalities and an insignificant portion by the rest of the district.

25. Charas is not consumed here. The consumption of bhang which is very limited is neither on the increase nor on the decrease. From the statistics showing the quantity of ganja annually consumed since 1874-75, when the district was formed, it will be seen that the consumption has been fluctuating and that it decreased last year compared with that of 1887-88. The decrease is attributed to the enhancement in the rate of duty.

26. There are no statistics in the office from which the proportion of the consumers could be ascertained. The following may give an approximate idea of it:—

(a) Habitual moderate consumers	7,455
(b) Habitual excessive consumers	1,230
(c) Occasional moderate consumers	994
(d) Occasional excessive consumers	195

Charas is not consumed. Bhang is very little consumed for which there is no shop here.

No statistics kept from which accurate information could be given. The following is an approximate proportion:—

(a) Habitual moderate consumers	7,455
(b) Habitual excessive consumers	1,230
(c) Occasional moderate consumers	994
(d) Occasional excessive consumers	195

27. (a) Rajputs, Brahmins, mendicants, men afflicted with diseases, and also men of the lower order. The first two because they require some sort of stimulant, but cannot drink spirit or tari which they consider from their religious notion as forbidden drinks. The third for the above reason as also because the drugs possess a peculiar kind of intoxication which helps in concentrating their mind to devotion. The fourth using the drug as medicine. The fifth, labouring classes, for alleviating their fatigue.

(b) Mostly mendicants and men associating with them and Rajputs.

(c) Men who use it now and then for medicinal purposes.

(d) Not confined to any particular class.

28. Approximately—

	Average allowance.	Average cost.
(a) Habitual moderate consumers	2 Mashas	7 Pies.
(b) Habitual excessive consumers	8 "	Annas 4

29. The following is a list of the ingredients used with bhang :—

When used.	Name of ingredients used.	REMARKS.
Used ordinarily by poor and other people generally.	I.—Bhang with black-pepper ground into a paste and made in the form of a ball. This is called bhang-ka-gola and is eaten.	It is called bhang-ka-gola.
	Bhang with black-pepper ground into a paste and then dissolved in some liquid (this is drunk). Sometimes they mix aniseed with the drug in addition to black-pepper.	It is called bhang.
	Sugar is sometimes mixed, but not always in addition to other ingredients.	
Used ordinarily by persons in easy circumstances.	II.—Bhang with black-pepper, aniseed, endive (<i>Cichorium endivia</i>), cardamoms, almond and seeds of cucumber and musk-melon (five ingredients exclusive of bhang).	This is called metaphorically Panch-Ratan (or five gems). These are the ingredients sold in the bazar and called bhang massala.
	Sugar is sometimes mixed in addition to other ingredients.	
Used by rich people in the summer season and rainy season.	III.—Rich people prepare their bhang with ingredients (II) ground into a paste with rose or kewra water. In the rainy season clove is mixed instead of cardamoms.	This is also called Panch-Ratan.
	Sugar is sometimes mixed.	
Used by rich people in cold season.	Bhang, clove, saffron, musk, nutmeg and mace, pistachio nut and almond.	This is also called Panch-Ratan.
Used on special occasions as Holi festival.	Bhang, curd, salt, cummin seed.	This is called Loorki (namkin or saltish).
	Bhang, milk, sugar, almond.	This is called sweet Loorki.

Besides these, the drug is consumed in several other ways :—

Bhang pua (pancake).

Bhang-ka-pakouri (a kind of dish made of bhang and pea meal).

Bhang-ka-majun (confection), etc.

30. Bhang is consumed in solitude	... $\frac{1}{16}$
Bhang is consumed in company	... $\frac{4}{16}$
Ganja smoked in solitude	... $\frac{6}{16}$
Ganja smoked in company	... $\frac{10}{16}$

The use of bhang and ganja is mainly confined to the male sex. Children are not allowed to contract the habit of consuming the drugs, especially ganja.

31. The habit of consuming any of these drugs is not easily formed but by long and constant use of them. Such habit when once formed, specially that of ganja or charas-smoking, it is difficult to break off. From daily observance as also from the

statistics relating to the consumption of ganja I can say there is no tendency in the case of ganja for the moderate habit to develop into excessive.

H. C. W.

Bhang is not much consumed, and charas not at all.

32. The followers of "Agam Marg" or "Brahmachari" according to "Samaya Char Tantra Shashtra" offer bhang to "Siva" and "Parvati" at the time of their worship. To "Biswanath" at Kashi or Benares and to Baldaoji in Brindaban (Hindu deities) bhang drinks are offered daily. Ganja and bhang are offered to Siva and Bairava at Benares and elsewhere. The use of the drugs at the worship of the deities mentioned above is regarded as essential. A sect of Muhammadan ascetics offer ganja to their Malang. The use of the drugs on such occasions as stated above is generally temperate. It is not likely to lead to the formation of the habit, nor is otherwise injurious. There are, however, some exceptional cases. The bhang offered to Baldaoji in Brindaban is used by the Pandás there, who and the Chowbays of Mathra are intemperate drinkers.

33. The consumption of these drugs is regarded according to the different circumstances of the consumers. A mendicant or an ascetic, though an excessive consumer, is still respectfully regarded; while a house-holder, or a student found in that habit, is looked upon with contempt and still more so if he associates with bad people. One using the drug moderately as a remedy for any disease or as a preventive of it or for alleviating fatigue is not disrespected. The moderate use of it by persons in easy circumstances or by big people is also not noticed. But special care is taken by all classes of the people that their children do not get into the habit of using the drugs, specially ganja; and still more so as regards charas, and this is so done with a precaution that the habit might not develop into excessive use of them and then they might be looked down by the society with contempt as "Bhangeri" and "Ganjeris." In Behar, as far as my experience goes, men of good family take care that the children do not get into the habit of using any kind of intoxicant, and this is the reason why in many families the use of any kind of stimulant is considered a vice, specially that of spirit and tari.

I do not know any custom in which the hemp plant is worshipped by any sect of the people; but I can say this much that as it is offered to Siva (for which reason it is called also Shewji-kabuti), the drink or the drug is respectfully regarded and not scorned as tari or sharab.

34. Yes; it would be a serious privation to several classes of the consumers to forego the consumption, if any, of the drugs they use, viz. :—

- (1) Bairagis, sanyasis and other Hindu fakirs who live in every district and travel throughout the country and in all climates (an idea of the numerical strength of which body can be well formed on the occasion when they periodically assemble at Pryag, Hardwar, and other sacred places of the Hindus), and who, with a few exceptions, are all consumers of the drug.
- (2) The Hindu sepoy in Government service and of Rajas and zamindars in British

India, of whom a very large number must be using the drugs, specially bhang, and during the summer season as thandai, for being mostly Rajputs and Brahmins, they cannot use tari or spirit, which they, from religious notions, consider as forbidden drinks.

- (3) The higher classes of the people, specially Rajputs and Brahmins, of whom a considerable number consume the drugs, and who, for the reason given above, consider spirits and tari as forbidden drinks.
- (4) Men suffering from maladies of which the drugs are remedies to the use of which they have therefore been addicted.
- (5) Persons who offer the drugs to their deities.
- (6) Besides those mentioned above, persons of other classes who have some way or other taken to the use of the drug and cannot give it up.

An idea of the bulk of the classes of the consumers of the drugs can well be conceived from what has been stated above.

35. (a) No; it would not be feasible to prohibit the use of any or all of these drugs.

(b) Yes; experience has shown, that strict prohibition of the use of any intoxicating article results in its illicit consumption.

(c) and (d) No; because we have not a large detective force surely. Men who from their religious notion cannot use tari or alcohol (being as forbidden drinks), nor can, therefore, find suitable substitute for the drugs hitherto used by them, and also those who either offer the drugs to their gods or have been using them as remedies for certain maladies, would find it very hard if deprived of their use. Certainly it would occasion serious discontent among the consumers.

(e) Taking into consideration the classes whom the privation would affect (Hindu mendicants, sepoy, Rajputs, etc.) it is very probable that the discontent might amount to some such danger.

(f) No; because the bulk of the consumers I agree with this, except with the last. If the use of ganja, a curse as it is to the country, were stopped, the majority of its consumers would infallibly turn to something else. A few would restrain themselves.

H. C. W.

36. For the reason above stated, that the bulk of the consumers from this religious notion consider alcohol as a forbidden drink, and also from the statistics relating to the consumption of ganja during the last many years, I think,—nay I am certain—that alcohol is not being substituted for any of these drugs, charas not being used, and bhang very little.

H. C. W.

37. Charas is stronger in its effects than ganja, of which the reason appears to be that the former is, as described above, resinous exudation of the flowers and leaves of the hemp plant, and, as such, it possesses more of the narcotic powers of the plant than its leaves and flowers, which constitute ganja, the thing also smoked.

38. There is no difference in the narcotic power of these three descriptions of ganja, and they

have therefore no different effects, either in kind or degree, on consumers.

39. Ganja and charas are smoked and not eaten or drunk.

The smoking of these drugs is not so injurious as the drinking or eating of the same, the reasons for which, as I think, are two-fold.

- (1) That the smoke conveys with it only the volatile matters contained in the stuff, while it leaves the more noxious ones in it, which are burnt to ashes during the process of smoking. But in eating and drinking the drugs every particle contained in them is taken into the stomach.
- (2) In smoking, even the volatile matters are not wholly admitted into the constitution of the smoker, because he throws out the smoke after he pulls it in.

This argument will be found to hold good analogically with other smokers. For instance, tobacco-smoking has a different effect from that of eating it. A man will vomit if he eats tobacco, but he does not by smoking it.

As regards bhang, the smoking of it is said to be more injurious than drinking or eating it. There the circumstances are different, which require explanation. What is smoked (of course very rarely and by poor people) is flower of wild bhang or phul bhang in its fresh state (when it has a more warming effect) and not its leaves; and what is eaten or drunk are leaves of the bhang plant (not flower) which are, as a rule, not used when fresh or new, but after they have been a year old or at least after one rainy season has expired after the time they have been gathered. The age mitigates the warming effect in the leaves, besides which they do not possess so much narcotic powers as the flowers of the plant, and it is for the reasons explained that drinking bhang is less injurious than smoking it.

40. In Bháo Prakásh and other books on therapeutics, the hemp plant (bháng) is prescribed as a remedy for several diseases, of which some are mentioned below:—

Piles, chronic diseases, gleet, phlegm, dysentery.

Very largely in Assam. Yes; bhang is also used in the treatment of cattle.

H. C. W.

41. Yes, it is said so. I do not know anything about the effect of charas; but as regards bhang and ganja, it is stated in Bháo Prakásh and other books on therapeutics, and also by the people, that they are beneficial in their effects—

- (a) as a food accessory and digestive;
- (b) to give staying power under severe exertion or exposure, and alleviate fatigue, and ganja alone is said to be beneficial in its effects;
- (c) as a febrifuge and preventive of diseases in malarious and unhealthy tracts.

Higher classes of the people use ganja or bhang or both for the purpose (a); labouring classes for (b); and by both living in malarious and unhealthy tracts for (c).

Very moderate in the case of ganja. What have been stated above refer mostly to habitual moderate use of the drug.

H. C. W.

42. It is stated in a *materia medica* in Persian that ultimately the drug does harm. But in *Bháo Prakásh* it is stated that the moderate use of the drug does no harm. It is observed, however, that the use of the drug does no harm (specially *bháng*) when the consumer lives upon nutritious and rich food. For example, the *Chowbays* of *Mathra*, who live on such food, and who, notwithstanding that they are excessive *bháng* drinkers and noted for such drinking, are always seen healthy and robust. On the contrary such people, addicted to the use of these drugs, as have no means to live, or who do not live upon good food, are generally seen emaciated.

43. Yes, moderate consumers of the drugs are seen inoffensive to their neighbours, unless the former are naturally wicked.

44. I have heard from the consumers of the drugs that they find the drug producing a peculiar kind of intoxication, attended with exhilaration of the spirits and hallucinations generally of a pleasing kind, refreshing and creating appetite. The effect of *bháng* lasts about six hours and that of *ganja* for about an hour or two. They have after-effects (said to be unpleasant). Want of subsequent gratification is alleged not to produce any longing or uneasiness.

It is probably on account of the drug producing hallucination that in Persian the *bháng* has the name of *falak sair falak taz*, both meaning roaming through the sky, or having the power of making one roam through the sky.

45. In a book on *materia medica*, it is stated that the use of the hemp plant ultimately produces noxious effects, both physical and mental, *viz.*, dimness of sight, insanity, loss of appetite.

In *Bháo Prakásh* it is stated that the excessive use of the drugs results in producing *únmád* (madness) and *kasasswás* (asthma).

As regards dysentery and bronchitis, my information is that the plant is a remedy for these diseases. With reference to the first disease, I recollect instances in which persons suffering from it have been cured by using *bháng*.

I myself know no instance of any person naturally of good habit turning to be immoral or debaucherous by being addicted to the drugs. Of course, persons have been seen and are seen becoming immoral, not by drinking *bháng* and smoking *ganja* alone, but when they join bad company. Such persons, by way of contempt, are said to be "*bhangeri*" and "*ganjeri*."

Too much use of these drugs certainly induces laziness.

I know instances in which persons used to the **i.e.* permanently, I conclude. Temporary insanity is a common result.

After giving up *ganja* for a time, a return to it again brings on temporary insanity.

H. C. W. in which excessive or moderate consumers of these drugs have turned insane.*

I wonder how it is that the *Chowbays* of *Mathra*, of whom there are some here also, and can be found in every large town, do not become stupefied and get these diseases, although they are habituated to excessive drinking from their childhood. It might be, as I have stated elsewhere, that these drugs, like opium, require rich nutritious food, and the *Chowbays* have, without exception, been seen living upon good food.

46. *Vide* the answer given above.

47 and 48. Yes. Instances have been and I do not know in the case of *ganja*; but in the case of opium I know of whole families from the youngest child, who have been opium consumers.

H. C. W. are found (but not as a general rule) in which children inherit the habit of using the drugs. Instances have also been found and are found in which the habitual use (but specially when excessive) affects the children of the consumer of these drugs.

49. Yes. It is moderately used as an aphrodisiac. Big persons get a certain quantity of *bháng* boiled with a certain quantity of milk, or with water mixed with ghee and extract ghee from it. This ghee becomes narcotic and is used in several kinds of aphrodisiac. I think prostitutes drink *tari* or country spirit instead of *bháng* or *ganja*. In books on therapeutics in Persian it is stated that the plant, warming effect as it has, increases virility but ultimately brings on impotence.

50. Excessive use has a like effect in a greater degree.

51 and 52. No. I find by experience that a large proportion of bad characters are men of lower and the lowest order; while a large proportion of the consumers of these drugs are men of the higher classes (this is so for the reason I have explained above). It follows, therefore, that a larger proportion of bad characters are neither habitual moderate nor habitual excessive consumers of these drugs.

I do not quite agree with this. A regular *ganja*-smoker must have *ganja*, and he often prefers stealing the wherewithal to buy it than to working for it. In Assam statistics of consumers of opium who found their way into jails used to be kept. They would throw some interesting light on this subject "quasi opium."

H. C. W.

The moderate or excessive use of these drugs has, in my opinion, no connection with crime in general, except that, as cases have been observed, the consumers, if stupefied by the use of these drugs, are deceived and deprived of their property.

53. No. From the quality the drugs possess, as is given in *materia medica* and is stated below, I do not think, nor have I ever seen, excessive indulgence in any of these drugs inciting any one to a premeditated or unpremeditated crime, violent or otherwise. I do not know of any case in which it has led to temporary homicidal frenzy.

"Indian hemp produces a peculiar kind of intoxication, attended with exhilaration of the spirits and hallucination said to be generally of a pleasing kind. These are followed by narcotic effects, sleep and stupor."

I think they are.

H. C. W.

54. No, as far as my experience goes.

55. I have experience of only such instances in which persons addicted to the excessive use of these or any of these drugs have been so stupid as to sign documents extinguishing the right in their property conveyed thereby, which a man of common sense would not do without taking consideration for the same. I do not think complete stupefaction can be induced by these drugs without admixture. I have heard of criminals having given some sort of drink to their victims (which

Very common, of course.

H. C. W.

made them senseless) on the false representation that the drink was made of *subzi*.

56. The effects of hemp used (a) in moderation are modified by eating sour things, and (b) in excess, by either vomiting with warm water mixed with cow's ghee or by taking strong sour drink. I have seen a man (very strong) boiling his bhang with capsules of dhatura to make the drug stronger in effect.

57. I have never come across a man eating ganja or charas; but I have heard of a Hindu mendicant doing so.

For the reasons I have given above, the effect of eating these drugs must be very injurious to constitution.

58. As far as my experience and opinion go, I agree as far as hemp the system of excise ad-drugs are concerned.

H. O. W. ministration in this district, as also in other districts of the division in respect to hemp drugs, is well worked. Charas is neither manufactured, imported, nor consumed in the district. Ganja is sufficiently taxed. Last year the quantity of all sorts of ganja consumed in the district was 157 maunds 18 seers 2 chittacks with duty and license fee amounting to Rs4,148, Rs16,545, against 159 maunds 35 seers 2 chittacks with Rs16,988 license fee and Rs33,989 duty in the previous year; the tax, therefore, on the drug amounted to above Rs8 per seer.

Bhang, of which consumption as intoxication is limited in this district, escapes taxation for the reasons fully contained in this office letter No. 531-E., dated 20th January 1893, an extract from which is given below for easy reference.

"The Special Excise Deputy Collector, Roy Brahma Dutt, who has had an experience of all the districts in Behar, attributes the following causes for there being no sale of bhang, and consequently of no revenue derived therefrom in this district:—

- "(1) The plant grows spontaneously in abundance, can be had everywhere, and bears no marketable value.
- "(2) In a damp country like Darbhanga, it is observed by experience that the consumption of the drug is not so large as in a dry district.
- "(3) It is further observed by experience that in damp places ganja, which is smoked, replaces to a certain extent the consumption of bhang, of which leaves are ground into a paste, and then dissolved in some liquid and drunk. It is for this reason that ganja in Darbhanga, Champaran, Saran, and

I.

Name of district.	Total excise receipts of district in 1890-91.	Total ganja revenue in 1890-91.	Percentage of contribution of ganja revenue to the district receipt.
	R	R	R
Gaya . . .	3,75,972	38,321	10.2
Patna . . .	5,53,293	1,16,888	20.9
Muzaffarpur . . .	1,83,076	41,748	22.8
Saran . . .	2,90,240	70,955	24.4
Darbhanga . . .	1,97,886	50,977	25.8
Shahabad . . .	2,63,300	88,002	33.4
Champaran . . .	1,66,813	70,187	41.5

Muzaffarpur contributes to the district excise receipts a larger proportion of revenue than in any other district in the division, except Shahabad, which has a special reason to account for its large proportion of contribution, viz., that the high classes of the people there

(who abstain from drinking spirit and tari) are mostly addicted to the use of ganja, bhang, or both. See the statement No. I on the margin.

"(4) A reference to the marginal statement No.

Name.	1896-97.		1897-98.		1898-99.		1899-00.		1890-01.	
	Number of licenses.	Quantity of bhang sold.	Number of licenses.	Quantity of bhang sold.	Number of licenses.	Quantity of bhang sold.	Number of licenses.	Quantity of bhang sold.	Number of licenses.	Quantity of bhang sold.
Patna . . .	36	121 29 7	34	114 8 3	25	110 0 10	21	81 10 10	21	71 39 8
Gaya . . .	17	177 21 6	17	186 10 13	17	186 10 13	17	177 23 11	17	165 11 8
Shahabad . . .	57	103 12 8	58	90 13 8	43	90 13 8	35	100 2 5	35	62 28 0
Saran . . .	6	10 33 5	3	87 35 15	2	13 20 7	4	12 33 3	4	7 23 0
Champaran . . .	2	2 13 3	2	11 32 4	1	1 20 7	2	1 23 0	2	1 18 4
Muzaffarpur . . .	1	2 13 3	1	1 24 0	1	1 20 7	1	0 23 0	1	0 23 0
Darbhanga . . .	1	2 13 3	1	1 24 0	1	1 20 7	1	0 23 0	1	0 23 0

Magistrate of the district, recorded an order that the plant, called bhang in Darbhanga, was not an exciseable article, and that the police should give up interfering."

59. The duty levied upon different kinds of ganja has been enhanced this year which, it is expected, will further increase the revenue, and may proportionately decrease the consumption of the drug. I do not, therefore, think it advisable to adopt any policy indicating the enhancement of tax on the drug so soon.

60. Ganja is not produced in this district, though wild hemp plant (or phul bhang, as it is locally called) abundantly grows here.

61. Charas also is not produced in this district.

62. Bhang plant grows wild so extensively in this and other north Gangetic districts in this division that it would be impossible, with the present strength and type of the executive establishment, to bring the production of bhang under the excise control by direct management. It would therefore be advisable to let the bhang mahal into farm; but the prospect of profit from the farm being little and the trouble of its management great, no farmer is expected to come forward for it. Under the circumstances, what suggests me as most suited to the occasion is

It will show that it is a combined effect of the causes mentioned above that in Muzaffarpur, which is a sister district of Darbhanga, as also in Champaran, which resembles both these districts in points of dampness and indigenous growth of bhang, the sale of the drug has been insignificant.

"(5) Darbhanga has an additional reason to account for no taxed consumption of the drug in it, viz., that during the last ten years there has been no successful prosecution for illicit possession of wild bhang in the district, because the High Court in 1892 declared in certain cases that prosecution for possession of wild bhang was illegal, and Mr. Boxwel, the then

to sub-divide the district into a certain number of vend-farms, and put up to auction each farm with a fixed number of ganja retail shops at fixed localities under the present system; and with a right to gather and sell bhang within the limits of the farm, for which no duty, except a monthly fee, will be levied. "This will be an amalgamated system of ganja retail shops under the fixed duty or the present system and bhang vend-farm." This will, it is expected, create competition among the present ganja dealers,

I think this will mean a great deal of undue interference, which is much to be deprecated here just at the present time. I would, however, punish people for regularly cultivating it, i.e., when it is not growing wild, to show we discourage it and do not recognize the right to grow it.

H. C. W. will serve in his own interest as a detective against illicit possession and sale of bhang and ganja in his farm. After the system has worked for a few years, the people, who now gather bhang, will cease doing so, as they will find both the danger of illicit possession of the drug, and the facility of obtaining it from a licensed farm.

63. I find nothing against the system in force as regards wholesale and retail of ganja and charas. With reference to bhang the objection is that, under the circumstances as they now exist, it is difficult and not feasible to manage this branch of excise in the districts in which bhang grows spontaneously and can be had everywhere, and for which I have suggested a system explained above.

64. I have no objection to the existing regulations governing the export and import of the drugs. I find, however, that the wholesale dealers have given no security, and if they sell their ganja while in transit, or anyhow clandestinely dispose of it and run away, how would Government realize the duty due upon the drug? I think they may be required to give a cash security of

They could easily find the money; but I do not think any necessity for this has arisen.

H. C. W.

R100 and deposit it by instalments in the saving bank if they find it difficult to pay it in a lump sum.

65. I have no charas sale in this district. With reference to bhang, I have already discussed the question of its taxation. As regards ganja, the incidence of duty per seer last year amounted to above R8, while we levy duty on distillery liquor at R2 per L. P. gallon and our incidence of duty on outstill liquor per proof gallon last year was R1-15-7, which much exceeds the tax levied on tari. The tax levied on ganja with re-

Ganja being such a much more harmful drug than opium, I do not think there should be such a difference between the two. Duty on the former should be gradually raised.

H. C. W. (see above) being R8 per seer, while Government sells the latter at R16 per seer in this district.

Certainly, because of the different amounts of the drug contained in a seer of each. If you look at a seer of each, you will at once see the difference. In flat a fourth is stalk only.

H. C. W.

66. Yes, it is necessary to levy duty at different rates on different sorts of ganja.

67. No, I have no objection to the present method of taxing ganja. Bhang has been discussed above, and charas is not sold.

68. Charas is not sold. For bhang there is no shop here, for the reasons explained above. The ganja consumers, it has been observed, take their ganja with them either to smoke it in solitude or in company. Rarely a customer has been seen smoking ganja at a licensed shop. There are no houses in this district intended for ganja smoking.

69. The wishes of the people are consulted and considered before a new shop is opened, and with reference to all the shops when they are visited by the inspecting officers.

70. There are no cases worth notice regarding the importation of hemp drugs from Native States. Petty cases of illicit possession of ganja by persons (ignorant of excise laws), being consumers and not smugglers, are detected on the British-Nepal frontier in the district, and they are dealt with according to law.

72. Evidence of BABU BANKU BEHARI DUTT, Excise Deputy Collector, Backergunge.

1. Excise Deputy Collector of Backergunge for about one year and general experience.

18. I have no experience of charas.

Bhang does not seem to deteriorate much, if kept with ordinary care, for one year. Ganja appears to deteriorate by keeping, but it remains good for a year with ordinary care. The cause of deterioration seems to be the loss of resin in case of ganja. I think protection from damp and excess of heat may tend to prevent deterioration.

19. Ganja is also used for preparing majum. I have come to know of two persons in this district, one of whom intoxicates himself by keeping a bit of ganja in his mouth and taking the juice thus extracted, and the other using it with betels, just

as tobacco leaves are sometimes used in this country. But this use is very rare.

20. Ganja is smoked generally by boatmen and labourers in this district, sometimes also by gentlemen class.

21. We have not here round ganja. Flat ganja (the vendors say) is prepared for smoking in this district.

23. The Sadar Sub-Inspector was telling me that when ganja smokers are in need of ganja and can't afford to get it, they sometimes use bhang for smoking.

26. Ganja.—The habitual consumers of ganja are generally moderate; 1 out of 100 persons seems to be habitual excessive consumer. There

seem to be few occasional consumers. In fact no body could tell me that there are voluntarily occasional consumers of this drug (ganja).

Bhang.—Bhang is occasionally taken in moderate quantities on festive occasions which sanction its use by Hindus. The occasional excessive consumers are those who intoxicate themselves with other drugs, the want of which drug drives them sometimes to this, and they do not find enjoyment in taking moderate dose. The habitual consumers are the up-country men.

27. *Ganja*.—They are generally taken from the class of labourers who after their hard and irregular labour and exposure find some laxity in administering this drug (ganja), and gradually it becomes a part and parcel of their existence.

28. The habitual moderate consumer here smokes from one to two annas worth of ganja per diem, and the habitual excessive consumer smokes from four to eight annas worth of ganja per diem.

29. (a) Tobacco leaves are ordinarily mixed with ganja, probably to render it less strong. We have not much of bhang here.

No, I do not know bhang massala.

30. No; children do not appear to consume these drugs. Ganja is generally consumed by the male sex at or after their youth, but females also, though to a less extent (generally prostitutes of a depraved class and mehtérs) consume this drug.

31. *Ganja*.—The habit is formed gradually, and, as in the case of every intoxicating drug, difficult to break off. There does appear to be that tendency to develop into excessive, though to a slight extent.

32. On Navami of Durga Puja in this district, small cakes of bhang are prepared and distributed, and at Calcutta they drink this drug after mixing it with water on Dasami of Durga Puja. In this district *gorkha larkus*, i.e., small cakes of bhang, are distributed in case a cow yields issues. The use appears essential. It is generally temperate. It is not likely to lead to the formation of habit. In the mela of Trinath, ganja is consumed.

33. The consumption of ganja is generally regarded as an evil practice, and is in disrepute probably because of the same reason owing to which all narcotics are held in disrepute as corrupting the moral and mental, and sometimes also physical, character of a man and as causing unnecessary expense of money.

34. Certainly it would be a serious privation to all classes of consumers to forego the use of this drug (ganja); most of the poorer class may fall ill, as without it they won't be able to bear fatigue and exposure which their calling requires, when once they have become used to it, and they won't be able for want of money to use alcoholic stimulants which may be used by the richer as a substitute. The poorer class form an overwhelming majority over the richer.

35. I do not think it would be feasible to prohibit the use of any of these drugs (bhang and ganja). In case of the richer class the prohibition is likely to be followed by recourse to (a) alcoholic stimulants, and in case of the poorer class to other drugs which are cheaper.

36. The poorer class who under the outstill system in this district used to consume alcohol are now having recourse to ganja.

38. Flat ganja is more intense in its effects than chur ganja (we have no round ganja here).

40. Bhang is sometimes used by native school of doctors as a digestive article.

41. (a) The moderate uses of bhang and ganja are food accessory and digestive.

(b) The use of ganja gives a staying-power under exertion and exposure to the ganja smokers.

The boatmen use ganja for the purpose (b). (The moderate habitual use of ganja I am referring to).

In case (a) moderate occasional and habitual use of bhang I am referring to, and moderate habitual use of ganja.

42. The moderate use of bhang appears harmless, as most of the up-country porters use it and still keep good health.

43. The moderate consumer of bhang is so, and there is no reason for thinking otherwise in case of ganja also.

44. It is refreshing. It produces intoxication; the effect lasts for two hours; after this there is again longing for subsequent gratification.

45 and 46. It makes the eyes of the consumer look yellowish red and makes the temper a little more irritative than ordinarily.

53. In spite of inquiry I have not come to know of any such case in the district where the excessive use of ganja has led to such things. We have no charas here nor much of bhang.

56. Ganja is mixed with tobacco to moderate its effects. Opium is sometimes mixed with ganja to heighten its effect.

57. When ganja is eaten, the effect is slower in comparison with smoking.

58. It is working well.

63. The present system of retail vend of ganja has placed no limit on the amount of ganja which can be sold by a licensee; hence the drug is sometimes sold very cheap, thus presenting an inducement to indulge in excess. On the other hand, if the system of issuing ganja according to license fees be introduced as we have in this district for two years by way of experiment, the system would work very well, and will prevent one vendor from underselling another (thus presenting a good opportunity of illicit sale) and also will prevent its being sold very cheap.

68. No such shop where they may be consumed on the premises.

73. Evidence of BABU NARAYAN CHANDRA NAIK, Khas Tahsildar and Deputy Collector, Angul.

Oral evidence.

I am Khas Tahsildar and Deputy Collector in Angul. I entered the service in 1872, as Kanungo. I have been Tahsildar since 1882. Since then my service has been in the Gurjat

States, that is in Angul. I have served in other parts of the division; but not in any other State than Angul. It is forty years since Angul was annexed. I have been in the States which are neighbouring to Angul. I have to inspect them and report under the orders of the Superintendent

of the Tributary Mahals. This only refers to those that border on Angul.

The hemp plant is grown on the homestead lands. I have never seen more than two or three, or four, plants together. I do not find hemp in all villages, only in one-third perhaps; and there it is not in every house, but only in certain houses. I have never seen it wild in the jungles. I have often been in the jungles. I have never seen it cultivated in fields.

In Angul and the neighbouring States sufficient ganja is prepared to meet the requirements of the local smokers. There is little export. There is sale of the drug among the people themselves: they bring it to bazars and markets in bundles to sell. This is not done to any great extent. Most depend on their own growth; but some (chiefly outsiders) have to buy. It is brought only in the season. At that time it is brought regularly to the markets and may be said to be commonly sold in the markets. The stocks brought are small; they are done up in bundles.

I should not say that there is large consumption. It is decidedly small. The consumers are as a rule agriculturists and day labourers. The consumption is also moderate. There is no excessive consumption. There is more use of ganja than opium, but much more use of liquor than of ganja. I see no increase or decrease, as far as I can judge, in the use of ganja. I think there is increase in the use of both opium and liquor. I cannot give any explanation of these facts. I merely judge from the fact that I see very few consumers of ganja at all—not more than ten or twelve in a year; whereas I see many opium and liquor consumers. I mean that I have seen these people actually consuming. I have no statistics or returns. I judge only by the few people I see. These consumers I see only at head-quarters.

In Angul there was prohibition of cultivation of ganja in Mr. Metcalfe's time. He ordered it in the Angul tract and such of the neighbouring States as were under management. This was seven or eight years ago. The plants disappeared.

Three or four years ago the prohibition was repealed, and then the plants began to reappear. Hence cultivation is greatly increasing these last two years. The prohibition led to complaints; but they were few. The people used to get ganja from the neighbouring States of the Central Provinces, where there was no prohibition. There were no shops or means of supply in Angul or the States concerned.

There is no excise administration in regard to ganja in the Angul District. We have nothing prescribed. We have no shops. We have no prohibition. There is consumption. The people consume the stuff they raise, and there is nothing to prevent their importing if they choose. There is the same want of excise system as in the neighbouring Tributary States.

I do not think there is any need of excise administration. I see no necessity in the habits of the people. The drug is not used to excess. I only met one man who was sent to the lunatic asylum, but was all right by the time he got there. I was told he smoked too much. I have never seen any other bad effects. So I see no need. Then again Angul does not border on British territory. It is sixty or seventy miles off. So we have not heard of smuggling into British territory from there. It is poor people who use the drug, and a tax would press on them. I see no reason therefore for taxing ganja, though liquor is taxed. Liquor is lightly taxed by the outstill system. If the system of ganja administration elsewhere were interfered with by smuggling, I should still consider that the taxation of ganja should not be imposed because it would fall on poor people who cannot bear taxation. The liquor consumers are poorer; yet they pay outstill taxation. I would not, however, advocate the abolition of taxation on liquor because the consumption of liquor is on the increase. Apart from my consideration for the poor, I see no objection to taxing ganja in these Native States. But I see no reason for it, as ganja consumption is not increasing. I know nothing of the difficulties in regard to smuggling. I only look at the question from the point of view of the Angul tract.

74. Evidence of BABU WOOMA CHARAN BOSE, Deputy Magistrate and Deputy Collector; Manager, Raj Banaili, District Bhagalpur.

1. As Deputy Collector, I had also been in charge of the sub-divisions of Araria in Purnea District, and Banka in Bhagalpur District. For nearly the last six years I am on deputation as Manager of the Banaili Raj.

2. The definitions of siddhi or bhang, charas and ganja, as given by Dr. Prain, may be accepted. Siddhi or bhang is also locally known by the name of sabji or patti. Charas has got no other name. Ganja is the general name. It is also called Buti by fakirs and ascetics.

3. I am not aware where ganja plant grows spontaneously. It is cultivated in the Rajshahi District, but I have no knowledge of that district. It also grows in Orissa. Bhang grows spontaneously in the Bhagalpur, Monghyr and Purnea districts, but not in abundance.

4. *Vide* answer to question 2.

5. Wild bhang grows in moist climates and in damp and sandy soil. Not much rainfall is needed.

6. In wet or damp soils the wild bhang is ordinarily dense. In sandy soils it is scattered.

7. No. Wild hemp (bhanga) grows spontaneously.

8. *Vide* answers to questions 7 and 3.

9 and 10. Cannot say, *vide* above.

11. Cannot say.

12. No, not to my knowledge.

13. Cannot say. Have no personal knowledge.

14. Ganja and charas are not prepared in the districts of which I have knowledge, but wild bhang is generally collected by the people in Bhagalpur, Monghyr and Purnea districts in two forms, one consisting of dried leaves and small stalks and the other of the flowering shoots—this latter not to a great extent. The possession of bhang is now very much restricted.

15. *Vide* answers to question 14.

(a) Sometimes dried leaves and dried flowers of the wild bhang are smoked mixed with tobacco.

- (b) Mixed with milk, sugar, fruits and spices into a sweetmeat or majum of green colour.
- (c) Made into an infusion or pounded with spices and then drunk as a beverage or sherbet.
- (d) It is also used as medicine for cattle.
16. Yes, but I cannot say if ganja or charas can be prepared from the wild bhang. They are generally male plants.
17. By the agricultural classes.
18. Yes, they do deteriorate if kept carelessly or exposed to damp or moisture. With ordinary care it keeps good for a year. If kept in airtight receptacles and dry places they don't deteriorate and keep well for a year.
19. Yes; only for smoking.
20. Almost all classes, especially ascetics, fakirs, mahants, and bairagies and religious mendicants. I am sorry I cannot give the proportion, but very few smoke charas.
21. All three kinds of ganja are used for smoking; generally flat ganja is preferred.
22. No native charas is used, but charas imported from Nepal or the North-Western Provinces.
23. Yes, by the lower and poorer classes and persons addicted to ganja when they cannot get it in time, but not to any marked extent.
24. Brahmins, Babbhans, Rajputs, ascetics, fakirs, mahants, bairagies, and the agricultural class of Hindus and some Musalmans drink bhang. Other classes and well-to-do people sometimes eat majum or bhang sweetmeats. I cannot give the proportion, but the number of consumers who eat bhang is not much.
25. I have no statistics, but, so far as one can see or hear, the use of ganja seems to be on the increase.
26. Cannot give the proportion.
27. Ascetics, fakirs, mahants, bairagies are generally habitual excessive consumers of ganja and bhang from their wandering habits. It also enables them to devote much of their time in undisturbed contemplation of their gods.
- Brahmins, Rajputs, Babbhans, agricultural classes, who abstain from drinking alcohol or to whom alcohol is prohibited by religious and social rules, are moderate consumers.
28. (a) One to two pice (ganja).
(b). Two to four annas (ganja).
- Bhang is cheap and does not cost much. A moderate consumer can use a pice worth of bhang for two or three days. I should think that some wild bhang is collected by the agricultural classes.
29. With ganja is mixed dry tobacco. Dhatura is sometimes used with bhang by confirmed drinkers when their object is to render themselves perfectly reckless or delirious.
- Bhang massala is also used. It consists of the following, *viz.*:—
Sonf (aniseed), lowng (cloves), ilaichi (cardamom), gol mirich (black pepper), dalcini (cinnamon), chini (sugar), seeds of cucumber and melon, kashni, rose leaves.
30. Ganja to a great extent in company. Bhang is used more in solitude. Charas is not consumed very much. Confined mainly to the male sex and the youths. Children scarcely use them.
31. Yes, and difficult to break it off. It has a tendency to develop into an excessive habit.
32. Lower classes, ascetics and fakirs generally offer ganja and bhang to their gods and deities whom they worship.
- There is a custom amongst Bengalis to drink bhang and offer to friends and visitors on the Bijaya Dasami, day after the Durga Puja, but it is very temperately used. It does not lead to the formation of the habit, nor is it injurious.
33. The educated and respectable class condemn the consumption of these drugs and hold the consumers in disrepute, because of their narcotic effects and because it leads to a habit which is difficult to break off, and because its excessive use is injurious. I am not aware of any custom of worshipping the hemp plant.
34. It would be a serious privation to habitual consumers of ganja to forego its use. If they do so, it would make them ill.
35. I do not see how the use of these drugs can be prohibited unless people themselves give up the habit. The hemp plant grows wild and spontaneous. It can only be prohibited by declaring its use as an offence and punishable under the law. Prohibition of the use of these drugs would certainly cause discontent among the consumers, but such discontent would not amount to any political danger. Habitual consumers would have recourse to other stimulants or drugs.
36. I do not think so.
37. Charas is very little used in these parts, so I cannot make a comparison.
38. Flat ganja is said to be milder than the round and chur ganja.
39. Ganja and charas are not eaten or drunk here, but ganja smoking is, however, more injurious than eating or drinking bhang.
40. Native physicians sometimes prescribe bhang as medicine in certain diseases. It is also used in the treatment of cattle. It is also given to cattle to shake off fatigue.
41. (a), (b) and (c). Yes.
- The agricultural and labouring classes mostly. I refer to the moderate habitual use.
42. *Vide* answer to question 41.
43. Yes.
44. It is refreshing. It produces some intoxication to the moderate habitual consumers: it removes fatigue, creates appetite. The effect lasts for three or four hours after each dose. Moderate use of bhang does not produce any longing or uneasiness, but the use of ganja does produce longing.
45. Not to any marked extent.
46. Habitual excessive use of these drugs produces noxious effects. It leads to longing; it impairs the constitution, injures digestion, causes dysentery or asthma, impairs the moral sense, induces habits of immorality and debauchery; it deadens the intellect, and produces insanity. I am sorry I cannot quote particular instances, but what I have stated above is the result of my general observations.
- 47 and 48. No.
- 49 and 50. Yes, also by prostitutes of the lower order. Excessive use of ganja, if continued for any length of time, produces impotence.
51. Yes, there are some bad characters among

habitual moderate consumers, but I do not think the moderate use of these drugs is connected with crime in general; but excessive use of ganja sometimes produces furious delirium and renders the consumer reckless.

52. *Vide* above.

53. Not that I know of.

54. Yes; I should think so.

55. No, unless stupefying drugs, such as dhatura, be mixed; and sometimes criminals, in order to further their designs, administer such admixture to their victims.

56. The effect of bhang is sometimes modified by the admixture of cooling ingredients.

57. I have no knowledge under this head.

58. I consider it to be working well.

59. I have no improvement to suggest at present.

60 and 61. Cannot answer.

62. We cannot control it, for bhang grows wild. The present excise rules for possession, license and supply of bhang are sufficient checks so far as possible.

63 and 64. None.

65. Yes, the taxation is reasonable. I do not suggest any alteration.

66. Yes; if they differ in quality.

67. I have no data before me, so cannot make any suggestion under this head.

68. There are licensed shops, but, so far as I am aware, these drugs are not consumed on the premises in the same way as liquor. Do not consider it right to allow these drugs to be consumed on the premises.

69. Generally not. It is only when objections are raised by the people of the locality that any enquiry is made or notice taken. I think local public opinion should be considered.

70. None that I know of.

75. *Evidence of* BABU RASIK LAL GHOSH, *Court of Wards' Manager, Dinajpur.*

1. I have had opportunities of consulting with certain up-country people and people of this district, specially with those who are accustomed to, and are supposed to have taken, either of these drugs. I have also consulted with the local shopkeepers of ganja, etc.

2. Yes; these definitions may be accepted for this part of the district. They are known as bhang, ganja and charas, as named in the questions.

3. The plants from which bhang is produced grow spontaneously, but very rarely in this part of the district.

4. It is known by the name of bhang or siddhi.

5. It grows generally on high land.

6. The growth of wild hemp (or bhang) is generally dense.

7 to 10. No such plants are cultivated in this part of the district.

11. The seeds found with the exported ganja leaves do not germinate.

12. I am aware of no such cultivation in this part of the district.

13. No such plants are cultivated in this part of the district.

14. Dry leaves of wild hemp (bhanga) are kept by a few people for using as medicine, both for men and cattle, but very rarely for intoxicating purposes.

15. The dry leaves of bhang are crushed or powdered with spices and sugar, and mixed with water for drinking purposes.

16. Leaves taken and dried from the places where the wild hemp grows spontaneously. The drink referred to above is prepared at home.

17. Bhang is prepared and taken up by the up-country people for luxury; by common country people as medicine, both for men and cattle.

18. Both ganja and bhang deteriorate in time. They are kept good for about two years.

19. Ganja is only smoked here.

20. Ganja is smoked by the low classes of people such as fishermen, mehtars, haris, up-country

coolies, and by men of debasing immoral character, but very rarely by the cultivators or other classes of people.

21. Round ganja is not sold here. Flat and chur ganjas are taken by the people.

22. Charas is not sold or used at this locality.

23. I don't know if bhang is ever used in smoking.

24. It is drunk (*vide* answer 17).

25. It is believed that the use of ganja is on the decrease on account of the increase of price.

26. Ganja—

(a) 5 per cent.

(b) 1 „

(c) 8 „

(d) 1 „

Bhang—

(a) 1 per cent.

(b) ...

(c) 5 per cent.

(d) ...

Charas is not taken in this locality.

27. They are generally low class people. Evil company, evil custom, debauchery and immorality lead them to the practice.

28. For ganja—

(a) One pice per day.

(b) One anna per day.

29. Dhatura is very rarely mixed with bhang to increase its intoxicating power. Tobacco is mixed with ganja to make it soothing. The name "bhanga massala" is almost unknown to the people of this district, but well known to the up-country people. It consists of black pepper, poppy-seeds, dried leaves of roses, cardamom, mohuri, kashni, seeds of khira, and seeds of kakri.

30. Ganja is generally smoked in company. Bhang is taken both in solitude and in company. They are mainly confined to the male sex, but low class prostitutes also generally smoke ganja. They are scarcely taken by the children.

31. Bad company leads to the habit of ganja smoking, which is not easily broken off. It is not

unlikely that from moderate habit one would go to excess.

32. Bhang is taken by the up-country people on Dol Jatra or Holi days, and by others on Dasami and Kali Puja days. They take bhang on the Puja days generally and temporarily. This may lead to a habit, but habitual drinker of bhang is very rare in this part of the district.

33. Consumption of bhang on the Puja days is considered religious. Hence it is called siddhi, i.e., one's wishes are satisfied who takes bhang on the Puja days. I am not aware that hemp is worshipped anywhere.

34. There will be no serious privation except to the ganja-smokers, as the number of consumers of other drugs are very few in this part of the district.

35. Prohibition from taking ganja will cause a serious inconvenience to the consumers, but no political disturbance can be expected. It is not likely that the prohibition will be generally followed by recourse to other drugs, as the effects are different; but some people of the labouring class, as indicated in answer 20, may take to country wine as an alternative measure.

36. Ganja is now rarely taken by the middle classes of the people, as it is considered more injurious than alcohol, and, in fact, ganja-smoking is looked upon by them with contempt and degrading to the society. Lower class people scarcely substitute it for alcohol; in the first place, the latter is more expensive; and, secondly, it is not suited to their taste.

37. Charas is not known in this part of the district.

38. Neither round ganja nor charas is sold here.

39. Cannot say.

40. Bhang is used in cattle diseases.

41. It is said that the moderate use of ganja and bhang does not injure health, but rather exhilarates the tired and the depressed low class people of labouring classes.

(a), (b) and (c) Yes: they are reported to be so.

A habitual ganja-smoker may use the drug for the above purposes, but not one who is not accustomed to it.

42. It is said that the moderate use of ganja and bhang is harmless, as it keeps up one's spirit and makes him more active and capable of undergoing much fatigue and troubles generally.

43. Yes; they are inoffensive.

44. Immediate effect of ganja is refreshing to a consumer. It produces in him slight intoxication, increases hunger and creates appetite. The effect lasts for about half an hour. Its after-effect is relieving to him. Want of such gratification to a habitual consumer causes uneasiness, dyspepsia, want of appetite, lethargy, weakness and inaction.

45. It is said that habitual use of ganja does not produce much noxious effect if the consumer

gets sufficient quantity of milk for drink and substantial food. But its effect is generally exciting. It excites passions, and may affect mental power when taken in excess like all other intoxicating substances. But when the consumer goes to excess by intemperate habit, for want of proper food, and by debauchery and immorality, he is subjected to all sorts of diseases, but not otherwise.

It is sometimes reported that excessive use of ganja may be one of the causes which leads to insanity, but certainly not in all cases.

47 and 48. I don't think that use of ganja is a hereditary habit, or that it affects the children of moderate consumers.

51. Except criminal tribes, I don't think other bad characters are moderate consumers. They generally go to excess in every respect, and commit theft and burglary to meet their want. It is generally found that poor ganja-smokers and opium-eaters commit theft when they are otherwise unable to meet the expenses of their habitual drugs. But the moderate use seldom, if ever, induces one to commit theft or crime in general.

52. Charas is not sold in this part of the district. Bhang is very rarely taken, and appears to be inoffensive in its nature.

53 to 55. I have no experience to answer these questions.

56. I have nothing more to add than what I have already stated regarding moderate and excessive use of ganja. Dhatura is sometimes used as medicine.

57. Ganja is only smoked at this locality. Charas is not sold here.

58 and 59. I am not prepared to answer these questions, as I have very little experience regarding excise administration, and have had no occasion to study the subject carefully.

60. Ganja is not produced in this part of the district.

61. Charas is neither produced nor sold in this part of the district.

62. I don't think that spontaneous growth of hemp plant for production of bhang should be controlled. It appears to be inoffensive in its nature, and is very rarely used in this district for intoxicating purposes.

63 to 67. I am not prepared to answer these questions, as I have no knowledge on the subject.

68. There are shops for licensed vendors of ganja, etc. Ganja is sometimes smoked publicly on the premises of the shops, which may be discontinued and not exposed to public view; but this may, however, be allowed in private compartments of the shops to be set apart for the purpose.

69. No new shop has been opened at this locality. I don't know whether the wishes of the people were consulted when the existing shops were opened.

70. I am not aware of smuggling or importation of hemp drugs from Native States in this locality. The drugs are sold by licensed vendors.

76. *Evidence of RAJA TENDUK, Manager, Government Estate, Kalimpong, District Darjeeling.*

With reference to the questions sent to me for answers regarding the use and effects of ganja, I have the honour to state that I have very little experience on the subject, and it is only within the last few years that I have known it to be an intoxicating drug.

The plant grows in abundance in this district at an elevation of 1,000 to 4,000 feet, but its use is almost unknown in the interior amongst the

Bhuteas and Lepchas; but there is a sect amongst the Nepalese, called sadhus, who indulge in the use of ganja.

But whenever I have come across these smokers, I have always found them to be somewhat eccentric in their opinions and somewhat cracked in their brains.

I believe it is deleterious to health to some extent.

77. *Evidence of BABU GOUR DAS BYSACK, Retired Deputy Collector, Calcutta.*

1. As Deputy Collector I had charge of the Abkari in several districts of Bengal during my incumbency of 28 years.

2. Whatever definition Dr. Prain might have given of the drugs, they are known in Bengal by the name of ganja, charas, and siddhi or bhang.

3. The Rajshahi District is the only district in Bengal in which the hemp plant is cultivated and grown under Government protection. It also grows in other districts, such as Bhagalpur, Mirzapur, and Ghazipur, but to what extent it is impossible for me to say. Several police cases of illicit cultivation of hemp in certain districts came before me for trial. From this it may be presumed that the soil of Bengal throughout the country is adapted to its spontaneous growth.

4. As far as I am aware, the hemp plant goes by the name of "ganja gach."

5. It seems that moist alluvial soil is suited to its growth.

6. In two or three districts, the names of which I forget just now, I was shewn some wild plants of hemp which were scattered about, but whether cultivated or spontaneously grown, I could not ascertain.

7. In Bogra and Dinajpur the hemp plant is also cultivated.

10. The cultivators of hemp do not form a special class.

14. All the products of hemp are prepared in the district of Rajshahi.

16. Bhang is prepared by the people in their own houses. Ganja and charas cannot be prepared from the wild plant.

18. These drugs deteriorate in time; for instance, ganja, when fresh from Rajshahi, is preferred by the smokers to old ganja. I am under the impression that, if kept air-tight, the drug would not lose its intoxicating power.

19. Yes; but ganja and siddhi are also used for the worship of Siva throughout India. Charas was not known to Siva: it is a modern preparation.

20. In Calcutta ganja and charas are used mostly by the Hindustanis, who mostly live in and about Bara Bazar. It is very difficult to ascertain the exact proportion, but, as far as I can gather, ganja is smoked by about 50 or 60 per cent. of low classes of Hindustanis, Marwaris, specially Marwari Brahmins, Kahars, Kurmis, and other low classes. The exception among the ascetic fakirs and sanyasis is one to 100 souls. As a

general rule they all smoke ganja, but not charas, which is not so strong, nor so very cheap. As regards the Bengalis, the people of Bag Bazar were at one time notorious for ganja-smoking, but their number in other parts of the town was much smaller. Compared to other castes, the proportion of the Bengali smokers of ganja and charas was and is considerably low; but the use of ganja is gradually increasing, because it is less expensive than alcohol. Charas is consumed by about 10 per cent.: it is mostly confined to well-to-do people of the above classes. Percentage is about one.

21. Generally the natives who smoke ganja hardly know any difference between the three forms.

22. The charas imported from Nepal, Thibet, is chiefly used. It is also imported from Kabul or that direction.

23. I am not aware that bhang is anywhere used for smoking.

24. Bhang is invariably taken in a liquid form and is never eaten; but it is sometimes swallowed by habitual consumers when travelling by rail. It might be said that it is eaten with the food, when it is used as a condiment in the preparation of dishes. A capital native *cuisine de chef*, without our knowledge, prepared some dishes with bhang that were more than ordinarily toothsome, and were highly relished by me and my friends; but the effect after the lapse of an hour or so was painful; we felt giddy and restless till the next morning. The proportion among Bengalis is about one per cent.

25. Ganja was largely smoked some years ago by the Bengalis of Calcutta, notoriously by the inhabitants of Bag Bazar, but it decreased while alcohol began to spread its sway. It has begun to increase again, because alcohol has become more expensive.

No appreciable fluctuation in the use of charas and bhang is visible.

26. Of the 50 or 60 per cent. of the Hindustanis, Marwaris, and others who are addicted to ganja, about one-tenth may be taken as habitual excessive consumers and the rest moderate. Of the occasional consumers the proportion is larger, but they do not smoke excessively—about five in a thousand may be excessive. The proportion of charas-smokers among the above classes is about 20 per cent.: of the habitual charas-smokers, five in a thousand may be taken as "excessive" and the rest moderate. As for occasional smokers, their number is smaller than that of the

habitual. The proportion of ganja and charas smokers among the Bengalis is infinitely small, but the rates fluctuate between the high, middle and low classes of Bengalis.

As regards bhang, about 80 per cent. of the Hindustanis are supposed to be habitual consumers, of whom about 10 per cent. are excessive drinkers and the rest moderate. There are also habitual consumers among the Bengalis, though the exact figure cannot be ascertained without local enquiry. Bhang is occasionally taken by every Hindu: it is essential on certain festivals, such as on Bejaya Dasami day in Bengal and Holi in the North-West.

Among the Bengalis the occasional drinkers may be taken at about one per cent.

27. The first part of this question has already been answered above. There is nothing in the habits of life which leads to the practice; occasional indulgence is not without the reactionary effect which bring on repetition. Constant use of each of the three kinds of drugs gradually grows into a habit. In respect to bhang it should be remembered that it is sometimes a religious observance.

28. For one pice, a chillum of ganja may be obtained, and among the very poor, four to six persons manage to have a pull, or virtually one pice worth of ganja satisfies four poor moderate smokers per diem. The average allowance to moderate habitual smokers, irrespective of their circumstances, is two or three chillums per diem. In the case of excessive consumers the quantity is by far greater—about 20 to 50 chillums each. I know well-to-do persons consume three to four chillums per diem; but the proportion among Bengali *bhadra-lok* cannot exceed one in a thousand. Poor excessive smokers assemble together and consume ganja according to what each can afford. One chillum of charas costs two pice. As for ascetics or fakirs, they smoke all day long; but their consumption varies from day to day according to the means at their disposal.

The foregoing remarks apply also to the use of charas, except that it is more expensive than ganja; that the number of chillums one can consume hardly exceeds four per diem.

Two tolas of bhang is the average daily allowance to a habitual moderate consumer: a tola can be obtained for a little more than a pice, the price varying between Rs 1-8 to Rs 2 per seer; but retail purchasers have to pay twice as much. The excessive habitual drinkers, such as Chowbeys of Muttra, generally consume one chhattack of the drug every day.

29. With bhang the following ingredients are ordinarily mixed:—

Black pepper, aniseed, coriander seed, cardamoms, cucumber seeds, musk melon seed, almonds, rose leaves.

Well-to-do people also use milk and sugar and rose water. Pomegranate and grape juice and saffron are specially used during the cold weather. In exceptional cases bhang sherbet is prepared with either unripe mango juice, ripe mango juice, bael fruit, phalsa fruit, or curd; but some or other of the eight ingredients named above are indispensable in making the draught. In sweetening the sherbet, sugar must be used, and this as well as milk is supposed to heighten the intoxicating power, and they are therefore preferred by the consumers. When acid juices are mixed, milk and sugar are dispensed with, but assafetida and cumin seeds are used. Ganja is

ordinarily smoked with tobacco leaves or prepared tobacco. Ganja *in excelsis* is made of the following ingredients, and is called pancha ratna (five gems), viz., ganja, charas, dhatura, opium and arsenic. There are people who smoke this deadly mixture. Pancha ratna also means a kalika, i.e., tobacco-pot having five receptacles for five following ingredients: ganja, charas, tobacco, tobacco leaves, opium or dhatura, the smoke from five receptacles passing through the pipe. Charas is not smoked by itself, but mixed with tobacco leaves and kneaded in the palm with the thumb: it is then rolled into a ball and put on fire till it is partially fried. When filled up with it and fire, the kalika is smoked. The bhang massala is composed of the six or eight ingredients mentioned above, and is sold in the bazar by the dealers of bhang.

30. Ganja and charas are smoked either in solitude or in the company of associate smokers, but bhang is taken openly. The first two drugs are chiefly confined to males, though occasionally we see low class women and "unfortunates" indulging in the use of the drugs. We have rarely seen children under twelve or fourteen years of age smoking ganja or charas; but those who begin at an early age cannot shake off the habit at any time of their lives. Bhang is taken by even children of nine or ten years of age.

31. Yes, the habit is easily formed, and, when confirmed, it is difficult to break off, though not so difficult as in the case of opium and alcohol. There is always a tendency to develop into the excessive, but that tendency is not so strong as in the case of opium eaters and wine imbibers.

32. For religious service, ganja, charas and bhang are used in the worship of the Lingam. At Tarkeswar, for instance, they are offered with milk and poured on the head of the mighty deity. Socially there is no occasion that makes the use of the drugs imperative. Sivaites or worshippers of Sakti smoke ganja in larger doses on the Sivaratri day than ordinarily, but those who do not smoke ganja at all need not indulge in it. It is quite different with bhang. Siddhi means *siddha* or success; and whenever any festival or ceremony takes place, for instance, a marriage or a *sradh*, the first article that must be purchased and brought home and kept in the house till the ceremony is over is a little siddhi as a guarantee of success, and a safeguard against any mishap. On festive occasions, such as Bejaya Dasami evening (last day of Durga Puja) in Bengal, and Holi in the Upper Provinces, bhang in the shape of sherbet (beverage) is offered, as a part of the religious observance, to every member of the family, and to every guest who, if they do not wish to drink, put a drop of it on the tongue by way of holy acceptance. Even little children, babies, are touched on the temple with a drop by the tip of the finger; females take siddhi on such days. On these and other ordinary occasions, some people, chiefly males, indulge to excess; but it does no harm to them beyond promoting a little merriment or hilarity and producing protracted sleep.

33. Smoking ganja and charas is regarded as disreputable. In the opinion of the respectable and sober the practice is associated with the idea of something like "fast life"—a scamp. Young people take to them for the sake of pleasure; hence it is always considered scandalous to use such narcotics. Like tobacco, which it is not the custom to smoke in the presence of our seniors, such as parents, uncles, or elder brothers, or of

their friends, or of old respectable persons, ganja or charas, in fact the huka or albola, is not touched openly and freely. It is attributable to no other sentiment than that of reverence for the seniors, associated, as it is, with the innate wish to appear as a puritan in their eyes and those of the public.

I am not aware that hemp plant is worshipped anywhere.

34. Yes; very serious privation it would be. The reason is apparent: the result would be the same as that of the prohibition of beer or tobacco in England.

35. Prohibition is not feasible nor expedient; it would produce serious and universal discontent and dissatisfaction—powerful factors in the production of political danger. The majority of the people who consume the narcotic drugs will certainly not have recourse to alcoholic stimulants; they will shun it as a sin, and rather die than drink spirits. If the prohibition be enforced, illicit consumption is sure to extend very widely.

36. Alcohol is certainly not resorted to as a substitute; but it is one of the pernicious evils that western civilization has introduced into the country, with the result that nearly the whole of the aristocracy and mediocracy ranks have been thinned. In Calcutta alone almost all the biggest houses have fallen prey to the ravages of alcohol. Whatever be the motive of the so-called philanthropists who have originated this enquiry, the impression has already got abroad that the ulterior motive of Government is to increase the revenue by supplanting the narcotics by the introduction of liquor.

37. Yes; charas causes headache, while ganja does not.

38. None that I am aware of.

39. Majum, that is prepared from bhang in the form of confectionery, is less injurious than ganja or charas.

40. Ganja is used by native doctors in the preparation of medicinal oils. Bhang is administered medicinally in cases of bowel complaints: it is also used in the treatment of cattle disease. It is occasionally given to horses when fagged up by overwork.

41. Yes; in (a), (b), (c),—all classes; moderate use, of course, I refer to.

Ganja and bhang possess valuable properties. Both are aphrodisiac. Bhang is specially beneficial in chronic diarrhoea; both afford refreshment under severe exertion, exposure and fatigue; all the three drugs have the staying-powers. In malarious diseases a native kabiraj of repute tells me bhang has been prescribed in fever cases with success.

42. It is beneficial. Moderate use is never harmful.

43. They are inoffensive—certainly never so offensive as a drunkard that is a pest to the neighbours.

44. It is refreshing. The intoxication it produces is a sort of giddiness that lasts for a short time. People who are habituated to the use of the drugs feel no more than a pleasant sensation of intoxication with more or less forgetfulness of worldly cares. The effect, of course, varies according to constitution and temperament. The bhang beverage specially creates appetite; the effects last for three to four hours. After-effects are bad when used in excess. The want of subsequent gratification to persons addicted to the use of the

drug produces a longing or some uneasiness, but not to the same extent as in the opium consumers. Moderate use, however, is beneficial—certainly far from injurious.

45. Habitual moderate use of the drugs does not produce any noxious effect on the constitution or the chest or the digestive power. It does not deaden the intellect or the moral sense. Dysentery may be produced by excessive ganja-smoking, but it does not appear so readily or surely as in the case of drunkards. If the ganja-smoker is in good circumstances and lives well nourished with ghi and milk, he may be sure of avoiding this as well as any other disease. Moral sense is not impaired, nor does it promote debauchery. Laziness is induced, but it is not the indolence that is habitual. Insanity is not produced unless ganja is taken in too excessive a quantity or for a length of time. If in rare cases of ganja-smoking an aberration of intellect is produced, it is only of a temporary nature. The hypothesis that ganja-smoking is the cause of insanity, or that insanity is the effect of hard smoking, cannot be accepted without a thorough impartial inquiry and examination by a committee of high medical men. I have never had occasion to see a confirmed ganja-smoker turn mad or insane; on the other hand, I know of two instances of habitual excessive ganja-smoking which tend to prove the contrary. A gentleman, late in the service, has been and is still in the habit of smoking ganja almost to an immoderate degree. He has passed his eighty-fourth year, and yet he is as hale and hearty as ever, without his constitution being at all affected by any disease. In the other case the man was a hard smoker from his youth when he saw better days; but being reduced to poverty, he was obliged to serve as a poddar at Alipur, where he used to walk from his house at Calcutta and return home at evening, thus traversing a distance of ten miles every day. He was given to smoking 20 to 30 chillums a day; sometimes his chillums rose to 100 to 108 per diem. He died in his eightieth year of dysentery; but such dysentery deaths occurring from drunkenness or other causes are, if not more, but equally common.

46. Already answered above.

47. Not that I am aware of. I have never heard that the habit is hereditary.

48. Yes; by young libertines; their mistresses use what their paramours do. It is injurious when carried to excess, but even in such cases the bodily injury or disease that they contract, if carefully scrutinized by medical men, would be found to have originated from other causes than the use of the drugs. Impotency is produced more by the excessive indulgence in alcohol than in drugs.

51. Almost all bad characters are habitual consumers of the drugs, specially of ganja. Moderate use has no more connection with crime than moderate drinking of wine or brandy. The criminal class is distinct from the class of ganja or charas-smokers.

52 and 53. The above remarks apply to these two questions. Not a single instance of temporary homicidal frenzy from ganja-smoking ever came to my notice.

54. Yes, dacoits for instance.

55. These drugs are not sufficient to stupefy a person. Dhatura is used in such cases.

56. Dhatura is smoked by itself or with ganja, always with tobacco leaves or in a diluted form.

57. I know nothing about eating or drinking ganja or charas.

62. The cultivation of the hemp plant should not be controlled. It would hardly be feasible.

69. The wishes of the people are never consulted before opening a shop; but a shop is hardly ever opened at a place where the consumption is expected to be *nil* or next to nothing.

78. *Evidence of MR. W. SARSON, retired Deputy Magistrate and Deputy Collector, formerly Abkari Superintendent, Chittagong.*

1. My experience has been in the districts of Backergunge, Mymensingh, Faridpur and Chittagong, where ganja is not cultivated, and charas and bhang not used; hence my answers to numerous questions must be *nil* and otherwise limited.

3. As stated above, I have never been in districts in which ganja is grown; hence I cannot answer this and the following questions.

7. There is a wild species of hemp to be found in this district which the natives call bhang; it is self-sown. It does not grow extensively, the reason being, perhaps, that the Excise officers do not permit it to grow; always have it cut down; at least they did so in my time.

12. It has never come to my knowledge.

13. No ganja is cultivated in the districts of Backergunge, Mymensingh, Faridpur and Chittagong.

18. Ganja deteriorates after a year. The old ganja is always burnt under the Board's rules. In a couple of years I should say it would be perfectly useless. No charas and bhang are brought to this district for sale.

19. As far as my knowledge extends, ganja is used only for smoking. I have no knowledge of charas.

20. All classes of the people smoke ganja, especially the lower order of them, such as coolies, chamars and fishermen.

21. I have only knowledge of the flat in my time, and that was the kind used by all classes.

23. I have heard that the wild bhang mentioned above is used by the natives for smoking and drinking when they had the chance. It is not restricted to any particular class or locality.

24. See above answer.

25. I believe the use of ganja has much decreased of late owing to the high rate of duty and price of the drug, and not from any disinclination on the part of the consumers if they could afford to purchase it.

26. I am sorry I cannot answer this question. I have no data to go upon.

28. This depends entirely upon one's means. A native will spend as much as a rupee a day for ganja, while a poor man will content himself with a few pice worth.

29. I know nothing about this.

30. A ganja-smoker generally likes to have his friends around him, who are also ganja-smokers. I have not heard of women or children smoking ganja.

31. The habit is easily acquired, but it is difficult to break off. It grows upon one.

32. I am not aware of any such customs.

33. I do not believe that the use of ganja lowers one in the social scale among his own class. I have never heard of the hemp plant being worshipped by any sect.

34. It would be a serious privation if a ganja-smoker did not get his ganja.

35. I do not think it would be wise to deprive a ganja-smoker altogether of his ganja. As it is, the high price of the drug has limited his consumption. This rule would apply to opium and consumers of other narcotic drugs also. Perhaps the prohibition would lead to alcoholic stimulants.

36. I am not aware of this.

37. Charas is not used in this district; at least it was not so in my time.

38 and 39. Cannot say.

40. I have heard of ganja being administered to cows for certain diseases.

41. To a ganja-smoker the use of ganja is beneficial to keep him in health.

42. It is beneficial.

43. I believe so.

44. It is good to him in every respect. It exhilarates him, and makes him enjoy his food. He has to take several smokes during the day to keep him up to the mark. I refer to ganja-smokers.

45. I do not believe that the moderate use of ganja, spirits, opium, or any other drug can, or does, produce any harm to anybody. It is the abuse of these things that harms one. Speaking for myself, I found that tobacco-smoking did not agree with me, and I have left it off with much benefit.

47 and 49. Am not aware of it.

58. I am not acquainted with the present system of excise administration, so cannot express any opinion.

79. *Evidence of MR. W. M. SMITH, Retired Deputy Magistrate and Deputy Collector, Sonthal Parganas.*

1. I have been in charge of the Excise Department of the Sonthal Pargana district, and also of the excise of some of its sub-divisions; lately of the sub-division of Deoghur.

2. Yes.

3. I have only seen it growing in one place, a deserted indigo factory in the Rajmahal sub-division.

4. I forget the local name.

5. I have no information.

7 and 14. No.

18. All deteriorate, and perhaps quite lose their effect in time. Ganja more than a year old is hardly saleable. I don't know what are the causes

of deterioration. Good storing is the only feasible plan.

19. I have never seen either used. Ganja is said to be smoked only.

20. Poor people are said to smoke ganja.

21. In Dumka flat ganja was mostly used, in Deoghur round.

23. I have only heard of its being drunk as a sherbet.

24. The Deoghur priests are the principal consumers of bhang known to me.

25. In the Sonthal Parganas the consumption of ganja is on the decrease.

26. I can't say.

34. I know that the Deoghur *pandas* are loud

in their complaints if from any cause there is stoppage of the supply to them.

36. I have heard the contrary asserted, *i. e.*, that when the supply of spirits is checked resort is had to ganja.

37 and 38. I can't say.

44. I only know that there is a craving for bhang.

53. I have known cases in which frenzy has been ascribed to ganja, but it was not enquired into.

59. In the Sonthal Parganas the supply of ganja is greatly restricted, the shops are few, and besides the duty on the drug there is a heavy license fee.

80. Evidence of BABU HEM CHUNDER KERR, *Kayasth, Retired Deputy Magistrate and Deputy Collector, Sub-Registrar of Sealdah.*

1. In 1876-77 I was placed on special duty under the orders of Government of Bengal, to enquire into and report on the cultivation of, and trade in, ganja in Bengal, and the result of this enquiry is embodied in the printed report submitted by me on the conclusion of my labours. I had thus the special opportunity of studying the minutest details of matters connected with hemp drugs.

2. The definitions are generally correct. These are the names by which these products are ordinarily known in Bengal (*vide* my report, paragraphs 26, 27 and 28).

Flat ganja, which is called in vernacular *chapta ganja*, is of two varieties, *mota* (large twigs) and *mihi* (small twigs). Round ganja is known as *gol ganja*, but in some parts of Bengal it is called the *mihi ganja*. Chur or broken ganja is also called *rora*.

3. The wild hemp plant may be seen in almost every district in Bengal, and it generally grows in such a state spontaneously. It is abundant in the districts of Bhagalpur, Monghyr, and North Behar.

4. For a list of the different names by which hemp is known I may refer to paragraph 10 of my report. The names do not, I think, in every case refer exactly to the same plant.

7. (a) For the production of ganja, the hemp plant is cultivated in the Ganja Mahal of Naogaon, which comprises parts of the three adjoining districts of Rajshahi, Bogra and Dinajpur. In the Gurjat Mahals of Orissa also cultivation of the hemp plant for ganja is carried on on a small scale.

(b) The hemp plant is not cultivated in Bengal for the production of charas (*vide* paragraph 27 of my report).

(c) In Monghyr, Bhagalpur, Shahabad, Champaran, and Patna, and particularly in the first two districts, the hemp plant is cultivated for the use of its leaves as bhang. It is also cultivated for the same purpose in some parts of Dacca and the Tributary Mahals of Chota Nagpur.

(d) I am not aware of the real hemp plant being cultivated for its fibres or seeds alone. But the fibres and seeds are utilised for various domestic purposes where the plant is cultivated for its leaves or for its flowers.

8. At present I am not in a position to definitely ascertain the increase or decrease in the area under cultivation. The information on this point which is available from the official reports is in fact based on mere guesses, and no actual measurement of the area is made annually. I am, however, disposed to think that, with the increase of duty and the influence of education and culture, the consumption of the preparations of the hemp plant is diminishing, and hence the cultivation is also declining to the same extent.

9. See paragraphs 38 to 60 of my report, for a detailed answer to this question.

10. There is no special class of hemp cultivators, but they are of the same classes as other agricultural cultivators (*vide* paragraph 88 of my report).

11. No.

12. I am not aware of any such cultivation.

13. Yes, it is so cultivated only in a limited tract of country known as the Ganja Mahal of Naogaon, which extends over the borders of the three adjoining districts of Rajshahi, Bogra, and Dinajpur. This tract was, however, not at first specially selected for the restriction of the cultivation, but the outturn in this tract being superior to that of the other parts of Bengal, in course of time the cultivation came to be restricted to this part of the province alone.

14. See answer to question 7.

15. For a full account of the method of the preparation of ganja, which is used for smoking, from the cultivated hemp plant, see paragraphs 61 to 78 of my report.

Charas, which is also used for smoking, is the pure resinous matter which exudes naturally from the flowers or leaves of the hemp plant. The collection of this exudation is made in various ways, generally from the leaves and flowers of the cultivated female plants in the Himalayan and Trans-Himalayan regions. This substance is, however, never collected by the hemp cultivators of Bengal.

Siddhi or bhang, which is used for drinking, is prepared by drying the green leaves of the hemp plant. It is prepared from either the cultivated or the wild hemp plant.

A preparation of siddhi mixed with sugar,

butter, etc., is called majum. It is used for eating as a confection by the dissolute.

16. Yes. It can be prepared from the leaves of the hemp plants grown only in the plains and also in the lower hills. In cold countries the narcotic passes away into the resins which exude through the leaves and the flowers. The wild plants do not yield ganja. Charas can, however, be obtained from the wild plant.

17. By the ordinary agricultural classes.

18. Ganja retains its narcotic qualities for about a year, after which it begins to deteriorate and becomes absolutely inert after two years. Ganja is a substance which is peculiarly amenable to atmospheric influence, and its narcotic property loses more or less according to the quality of drug, the state of the weather, and the length of the time it is kept in the godown. It is mainly to the influence of the atmosphere that the deterioration caused to ganja is due. The deterioration may be prevented to a certain extent by minimising the risks of exposure to sun and air.

(Vide paragraph 122 of my report.)

19. Ganja is almost solely used for smoking, but it is occasionally used for medicinal and religious uses. As a medicine it is used in cases of itches and some other cutaneous diseases, and an extract prepared from ganja on the scientific method by the medical authorities of India is also used, I understand, in case of malarious fever, etc. Offerings of ganja are sometimes made to the tombs of Muhammadan saints or Pirs.

Charas is used only for smoking; never for any medicinal purposes. I understand that it is sometimes drunk, but I am not personally aware of such a practice.

20. As a rule, the hemp is not smoked by the agricultural classes; the artisan class and the syces, sweepers, and palki-bearers, and a few persons of the middle class, as well as mendicants, make use of the drug. To my estimation the actual total of smokers in the Lower Provinces and the North-West may be reckoned at about two lakhs of persons. Habitual charas-smokers are very few in Bengal. Charas is taken by ganja-smokers to whip up the effect of ganja. It is difficult to ascertain the number of charas-smokers.

21. See paragraph 23 of my report for answer to this question.

22. Native and foreign charas are used, but the Himalayan charas is preferred and fetches a higher price. Foreign charas is imported from Central Asia, Ladakh, Yarkand, Turkistan and Herat.

23. Bhang is now very seldom used for smoking.

24. Up-country people, such as darwans, etc., generally drink bhang. In Bengal the habit was at one time very prevalent, but it is now fast disappearing.

25. The use of all kinds of hemp drugs is steadily decreasing. The habit is looked upon as a low one, and the effect is considered to be very baneful, hence the decrease of consumption.

26. It is very difficult to make an estimate of such a proportion. Generally the ganja-smokers are habitual moderate consumers, but the jogis, sadhus, and mendicants may be classed as habitual excessive ganja-consumers. Siddhi and charas consumers may be classed as occasional moderate consumers. Very few cases are to be met with of excessive consumption of these two drugs.

27. The people who take the hemp drugs generally belong to the classes who have to earn their bread after a considerable manual labour. The drugs are used by such people as food accessory, refreshing, stimulant, or occasionally for intoxication.

28. A habitual moderate consumer of ganja smokes on an average a drachm of the drugs per diem which costs him about two pice, while a habitual excessive consumer can smoke an ounce or more a day, and the cost proportionately increases.

Habitual moderate consumers of siddhi generally take from half to two tolas a day, while an excessive consumer's dose varies from three to five tolas.

29. Ordinarily the drugs are taken by themselves, except bhang, which is mixed with aniseed, pepper, sugar, etc.

Dhatara is mixed with bhang or ganja to produce uncontrolled intoxication for the purpose of committing some violence. The drugs are also mixed with other dangerous drugs, such as nuxvomica and strychnine, etc.

30. The consumption of hemp drugs is generally confined to adult males. Children and women are seldom found to take these drugs.

31. Yes, the habit is easily formed. In my experience, I have found that the habit is difficult to break off. Yes, I think there is a tendency to develop into the excessive habit.

32. The only social or religious occasion on which siddhi is taken in Bengal is on the last day of the Durga Puja, when friends, relatives and guests are offered a drink of siddhi, and it is essential that every one should at least put a drop of it on his tongue. Yes, this use is essential. It is temperate generally. No, it is not likely to lead to the formation of the habit.

33. The consumption is generally regarded with great disfavour. The practice is looked upon by the society as low and disreputable. The sentiment is attributable to the injurious effects of the drugs by their abuse. I do not know of any such custom.

34. Yes, it would be to a certain extent, as the people who are in the habit of taking such drugs must have to satisfy their longing for intoxicating substances by other costly exciseable articles, such as alcohol, etc., or by equally or more deleterious drugs prepared from wild plants (paragraph 138 of my report).

35. (a) No.

(b) Yes.

(d) Yes, to a certain extent.

(e) I do not go so far as to think that the prohibition will lead to a political danger.

(f) Yes.

36. My reference leads me to believe that alcohol is not being substituted for any of these drugs.

37. The effects of the two drugs are almost the same, though I am positively of opinion that charas is much milder than ganja.

38. In kind the effects of these drugs seem to me to be the same; they are only different in degrees.

39. Ganja and charas, if eaten or drunk like bhang, is decidedly far more injurious than the usual form of taking them by smoking. These drugs, when taken internally, have a very strong physiological effect. The habitual moderate use

of the siddhi drink, however, produces no perceptible effect on the human system.

40. Bhang is recommended by native physicians to persons suffering from long protracted chronic diarrhoea, who find it very efficacious in checking their complaints. I do not know whether these drugs are used in the treatment of cattle disease.

41. (a) Yes ; moderate habitual use may be so to the classes who cannot afford for alcoholic drinks, but yet require some such substance to aid their functions of the stomach.

(b) Yes ; moderate habitual use is considered to exert such an effect on the labouring classes who consume them.

(c) Yes ; moderate occasional use. They are believed to be efficacious in such cases to some extent to the people of the poorest classes in districts in which such diseases prevail.

(d) It is also used by the mendicant class to control the passions and sensibilities to which human flesh is subject.

43. Yes.

44. The moderate use of ganja by a habitual smoker does not produce any decidedly intoxicant effect on him. It is refreshing to him and does not affect his appetite. The effect lasts for several hours. To a habitual consumer of ganja, the want of subsequent gratification does produce some longing or uneasiness. The want of charas to a habitual consumer does not, however, cause any longing or uneasiness.

47 and 48. I have not been able to discover this.

49. Majum, a preparation from bhang, is used as an aphrodisiac. Bhang is also mixed with a variety of stimulating spices and made into different kinds of congeries, which are reckoned to be highly aphrodisiacal. I do not know whether it is so used by prostitutes. As an ordinary narcotic the moderate doses of hemp drug are harmless, but when mixed with other stimulating drugs they become really injurious.

50. The excessive use of the hemp drugs is sure to produce the most pernicious effects and permanently impairs the constitution.

51. There is not necessarily any direct connection of crime with the consumption of hemp drugs, but a large proportion of bad characters is found to smoke ganja and the other allied drugs habitually. Sometimes a man intent upon some crime would intoxicate himself with a dose of ganja.

52. By excessive use of these drugs a man is sometimes driven to commit an act of violence or imprudence which he would not do if he were temperate in his habits.

53. Yes, it does. No such case has been observed by me personally, but I have reasons to think that such cases, though rare, do happen occasionally.

54. Yes ; I believe it is sometimes so used.

55. Criminals do sometimes resort to such dodges. It is supposed that complete stupefaction cannot be induced by any of these drugs alone without the admixture of some more powerful stupefying substance.

56. In general the hemp drugs by themselves, if taken by habitual smokers in moderate dose, are harmless, but when mixed with other injurious substances, such as nuxvomica, cantharides, etc., the effects are aggravated, and the drugs become harmful more or less as they are taken in moderation or in excess.

57. I have no experience of ganja and charas being eaten or drunk.

58. I am acquainted with the excise administration of Bengal in respect to ganja, and am of opinion that the system which prevails at present is on the whole working fairly well, but it is, I consider, imperfect in some respects.

59. The first improvement that I would suggest will be the reduction of duty levied on ganja, which has been raised rather too high. With increase of duty smuggling becomes more rife (*vide* my report, paragraph 135).

The prohibition of private storage and the establishment of public godowns for the storage of the drug after manufacture will be my next suggestion of importance. This will put a stop to smuggling once for all (*vide* my report, paragraph 131).

A spirit of too frequent and injudicious interference with the cultivators has grown up, and the abuse of the power of controlling the cultivation of ganja will lead to total abandonment of the cultivation altogether.

There are other crops, such as sugarcane, jute, tobacco, &c., which are not less profitable than ganja cultivation ; and the oppressed cultivator will find no difficulty in giving up the cultivation of ganja. This tendency should be checked by all means.

60. No particular modification of the system under which cultivation and manufacture of ganja is carried on is in my opinion necessary.

62. The cultivation of the hemp plant for the production of bhang may be carried on under the same system as ganja cultivation, the Excise Deputy Collector and the Excise Sub-Inspector respectively taking the place of the Sub-Divisional officer and the Supervisors in the Ganja Mahal in addition to their other duties.

63. No.

64. No. The existing regulations are, I believe, working fairly well.

65. As far as the taxation of ganja is concerned, I think it has been carried too far within the last decade. I have very little experience of the taxation of the other drugs.

66. Yes ; the scale of duty should be fixed according to the quality of the drug and the waddy portion of each kind of the drugs.

67. I have no objection to the method of taxing ganja.

68. I do not know of any such premises for the consumption of the hemp drugs.

69. Yes ; the system of local option is in vogue. Local public opinion should be consulted.

70. Except charas, which is imported, the other hemp drugs are manufactured in Bengal, and there are very rare instances of smuggling of ganja or bhang from the Native States.

81. *Evidence of BABU KALI DAS MUKERJI, Sub-Deputy Collector and Superintendent of Distillery, Serampore, Hughli.*

1. From my experience as an Excise Officer for a period of about seven years in several districts of Bengal.

2. Dr. Prain's definitions of ganja, siddhi and charas are substantially the same as given in the Bengal Excise Manual of 1891, and also corroborate the statements of my informant, who works some months every year in the ganja field of Naogaon at Rajshahi. Ganja, siddhi, and charas are known as such in Bengal proper. Siddhi is sometimes known as bhang, but I have never heard of its being called sabji or pati in any Bengal district.

3. Murshidabad, Pabna, Hughli, Khulna, Jessore, and Mymensingh. In Mymensingh and Jessore the wild hemp plant is comparatively abundant.

4. The wild hemp plant known as siddhi or bhang and referred to in paragraph 3 is exactly the same plant and does not refer to any other plant.

6. Often dense, rarely scattered.

7. There is cultivation of the hemp plant under Government supervision in Bengal. Ganja is cultivated at Naogaon, and bhang or siddhi in Monghyr and Bhagalpur. The quantity produced is sufficient to supply whole Bengal.

12. No, I know no such case, nor have I any reason to believe the existence of such cultivation or production.

13. The cultivation of hemp plant for ganja is restricted to Naogaon in the district of Rajshahi.

14 and 15. Siddhi does not require manipulation like ganja. It is enough for a man to cut some full-grown wild hemp plants and dry them. The leaves when dried are taken off and stored in for consumption. No other process is necessary, whether the drug is intended for drinking, smoking or eating.

16. Bhang is sometimes prepared by the people in their own houses. It can be prepared from the hemp plant wherever it grows. I do not believe that ganja and charas may be so easily, and therefore safely, prepared as bhang. I know no case in which ganja or charas has been so prepared from the wild hemp plant. This is probably due to the ignorance of the people in general as to the art of preparation or manipulation.

17. Bhang is prepared generally by the lower and middle classes of the people from the wild hemp plant.

18. Ganja and bhang usually deteriorate at the end of a year, though kept with ordinary care. The drugs lose their effects in time, and at the end of two years, calculated from the date of storage, are almost sure to lose their narcotic property.

19. Ganja and charas are generally used for smoking only. To grind ganja into a paste and then dissolve it into some liquid for the purpose of drinking is very rare. I have seen only one case in which an Uriya Brahmin in Murshidabad used to grind ganja and drink it after dilution. As for the medicinal use of these two drugs (ganja and charas), native physicians rarely, if ever, use them. I am not sure if medical science of the west (homœopathy and allopathy) as now practised in India make use of these drugs.

20. One-half per cent. of the total population of the districts mentioned in paragraph 3 and one

per cent. of the male population of the same districts may be roughly taken as consumers of ganja. But charas is consumed by a very limited number in those places. The proportion of charas-smoking persons may be roughly taken as one to every lakh of the male population. Ganja is consumed by all classes of the natives of the soil, though the greater number may be found in the labouring classes, Muhammadan fakirs, and Hindu friars. Charas is, on the other hand, generally consumed by the middle and higher classes, and rarely, if ever, by the lower stratum of the Indian society. I know no case in which a woman was found to consume ganja or charas.

23. Bhang is very rarely used for smoking. I have seen only one case in which a Brahmin of some respectability once smoked bhang for want of time and apparatus to grind and dissolve the drug.

24. Bhang is usually consumed by the higher and middle classes, and occasionally by the labourers. It is, however, often consumed by Hindu friars (not Muhammadan fakirs), and is a special favourite drug of the up-countrymen living in Bengal. By these men I mean the Hindus and Jains, such as Marwaris, Kayias, and Shings, but not Muhammadans.

25. Consumption is on the increase :—

Consumption (whole Bengal).

1885-86.	1886-87.	1887-88.	1888-89.
	GANJA.		
Mds.	Mds.	Mds.	Mds.
5,717	6,266	6,550	6,413
	CHARAS.		
Mds. S. Ch.	Mds. S. Ch.	Mds. S. Ch.	Mds. S. Ch.
2 15 8	3 17 1	4 35 10	4 36 4
	SIDDHI.		
Mds. S. Ch.	Mds. S. Ch.	Mds. S. Ch.	Mds. S. Ch.
859 0 0	963 38 12	1,009 38 10	1,020 12 9

26. In order to answer this question, it is necessary to assume a certain quantity as the standard of moderate consumption. Taking $\frac{1}{16}$ chhattack of ganja, $\frac{1}{8}$ chhattack of siddhi, and $\frac{1}{16}$ chhattack of charas as the ordinary standards of moderate consumption, the following proportion seems to exist between the different kinds of consumers and the total number :—

	Ganja.	Bhang or siddhi.
Habitual moderate consumer	$\frac{1}{8}$	$\frac{3}{4}$
Habitual excessive consumer	$\frac{1}{4}$	$\frac{1}{8}$
Occasional moderate consumer	$\frac{3}{8}$	$\frac{1}{4}$
Occasional excessive consumer	$\frac{1}{8}$	$\frac{1}{8}$

The proportion for ganja may be roughly taken for charas.

27. Ganja is used by labourers as a refreshing stimulant, by the middle class as a less expensive relaxation, by the idle sons of the millionaires as a

positive intoxicating drug auxiliary to drinking pleasures. It is used by the travellers, as well as by the fakirs and friars, as a safeguard against disease in malarious tracts.

Charas closely follows ganja in this respect.

Siddhi is usually used by the higher and middle classes as a digestive, pleasure-giving, invigorating drug and purifier of blood. It is successfully used by some persons as a precaution against costiveness and commencing acidity. The Hindu friars and jogis are said to use it to help them in their religious contemplation by increasing the powers of concentration. Specially from this point of view siddhi is preferable to liquor.

28. The average cost of ganja or charas for a moderate consumer is $\frac{3}{4}$ of an anna per day, and that of siddhi $\frac{1}{4}$ of an anna. Habitual excessive consumers have to spend nearly double the amount.

29. The ordinary ingredient mixed with ganja and charas is tobacco soaked in molasses. In exceptional cases both these drugs are kept in rose water for hours before consumption. This is said to be done for the sake of flavour only. Siddhi is usually ground into a paste with some black pepper and anise, and then dissolved into water. This is the general way followed by 75 per cent. of the consumers. The object of this method is to secure the good effects of the drugs as described in paragraph 27 of this report. The most well-to-do sections of the consumers use milk and sugar instead of water, and the object of such a mixture is to make the drug more palatable and more intoxicating. I know no case of dhatura being used with any of these drugs.

30. Unlike liquor and madak, ganja, charas and siddhi are generally consumed in solitude, though there are occasional cases of consumption in company. Ganja and charas are confined to the male sex, and siddhi occasionally extends to the other sex, though such cases are rare. These drugs are, however, generally consumed both by the young and the old. I know only one case in which a Brahmin boy of fourteen years of age used to smoke ganja.

31. The habit of consuming all these drugs may be formed in a month or two if taken daily or at regular intervals. But I do not think that it is very difficult to give up the habit. Jail prisoners accustomed to these drugs before conviction are, as a rule, compelled to give up the habit after admission into the jail. But they do not appear to suffer much by the change, and most of them improve physically within a short time. I have reason to believe that the moderate use of these drugs, like all other intoxicating articles, has a tendency to develop to excess.

32. There is only one socio-religious custom in many parts of Bengal, so far as the consumption of siddhi only is concerned. It is generally after sunset on the Dasahara day that many Hindu households in Bengal prepare a good deal of siddhi to drink as well as to entertain the neighbours who meet on this occasion for reciprocal blessings and good wishes. Siddhi is considered on this occasion as a symbol of success for the year next ensuing. I do not think that the use of siddhi on this occasion is essential, nor have I ever heard of any pundit justifying its use on this occasion by any formal religious injunction or reliable text from the Shastras. Dasahara consumption is, however, temperate, and in some cases formal, and does not lead to the habit.

33. Consumption of siddhi is generally regarded as innocent, and no disrepute is attached to it. But the habit of smoking ganja has been stig-

matized by public opinion both from social and religious points of view, and I think very justly, in the majority of cases. A ganja smoker is physically weak, morose and melancholy in temper, moving dry sticks in appearance, looking more like an apparition than a human being. It would be very difficult, if not impossible, to find out a dutiful son, a loving husband, an affectionate father, a trustworthy servant or a reliable officer from the rank of ganja consumers. As members of society they are generally useless and disagreeable, and are looked upon by the public as worthless specimens of humanity. This picture of the class applies only to the confirmed ganja smokers who have gone to excess. But it should be borne in mind that moderate use, as already remarked, gradually develops into the excessive. I had opportunities to observe more than fifteen ganja smokers of various classes in different districts of Bengal, and the above description is justly applicable to most of them.

I should record here two cases which differ widely from others which have come under my observation. I know a Bengali official of high rank (Sub-Judge) who used to consume ganja moderately, and a sanyasi (friar) who consumed both ganja and siddhi as often as he liked. But the Sub-Judge is said to have done his work very satisfactorily in spite of ganja, and the sanyasi, whom I had ample opportunity to observe for more than a year in my native village in Jessore, was an excellent man. He was physically strong, humble and amiable in manners, intelligent, pious, and thoroughly devotional. But these are isolated cases, and it would be an imperfect generalisation to draw any inference from such insufficient data.

34 and 35. As these two questions are closely connected to each other, I take them for one and answer accordingly.

Siddhi.—(1) It would be a serious privation of the bulk of the consumers of siddhi to forego its consumption.

(2) So far as my experience and information from native physicians go, I am inclined to believe that a moderate use of siddhi invigorates manhood, purifies blood, increases digestive powers, prevents costiveness and gives pleasure.

(3) From medical point of view siddhi is a highly valuable article. Indian medicines, like *kameswar madak*, *Gangadharchurna*, and others of similar description and established reputation, of which the Hindu medical science is justly proud, owe their existence to siddhi.

(4) Under these circumstances it would be a questionable policy for Government to enforce total prohibition of such a useful drug.

(5) Such prohibition would surely create discontent, and Government will find very little to justify such a measure.

Ganja.—Considering the advantages and disadvantages of the use of this drug, I have no hesitation to say that its consumption should be totally prohibited for the following reasons:—

(a) It causes mental, moral and physical deterioration. Dysentery, laziness, insanity, and want of self-respect often turn out to be the inevitable results of ganja smoking.

- (b) Native physicians do not, so far as I know, want this drug for its medicinal property, if any.
- (c) If Western medical science, as now practised in India, cannot do without it, a very limited quantity may be cultivated in some Government botanical gardens to supply the demand of the medical department only.
- (d) Prohibition of consumption would cause privation to consumers for *some time* only. For they are almost sure to take recourse to other exciseable articles. It would create discontent among the ganja smokers. But their number does not exceed one-half per cent. of the total population, and Government will have the sympathy of the remaining 99½ per cent. Secondly, Government have very little to apprehend in shape of political danger from the proverbially worthless men of the ganja-smoking class.
- (e) The reasons usually put forward in favour of ganja consumption are as follow:—
- (1) That Hindu friars and jogis cannot do without it, for it helps them in their religious contemplation and sustains them under severe exertion and exposure.
 - (2) That it is a safeguard against disease in malarious tracts.
 - (3) That it serves the labouring classes as a refreshing stimulant, alleviating fatigue.

I do not think that any of these reasons is conclusive, though plausible. In fact none of

them stands the test of a close examination. If any intoxicating drug is at all necessary for friars and jogis, alcohol, opium or siddhi may serve the purpose. Eight kinds of intoxicating drugs are prescribed in the *Tantras* for Hindu devotees, and it is optional with them to take any if they care to do so at all. So any measure of Government prohibiting the use of ganja would not interfere with this religious class of consumers, for seven sorts are still open to them. But Manu, the highest authority on Hindu religion, encourages abstinence in unmistakable terms:—

“There is no sin in taking meat or liquor, or indulging in sexual intercourse; for every man is naturally prone to them. *But the highest virtue consists in total abstinence.*”

That ganja is a safeguard against disease in malarious tracts is not necessarily true. I know two men of the Khulna district who acquired the habit of smoking ganja in the district of Dinajpur, where both of them had to go on private service, but there are numerous gentlemen (both Europeans and natives) who were not affected by malaria in Dinajpur, though they never smoked ganja at all.

Even as a stimulant and remover of fatigue ganja has very little to recommend itself to the labouring classes. There is no doubt that a labourer, who has acquired the habit of smoking ganja, works well for the first two hours just after taking a chillum* of ganja. But as reaction begins to set in, the labourer begins to feel aversion to work, becomes uneasy and restless, looks sullen and evades work, if possible. A careful observation is sure to establish the fact that any ordinary labourer whose only stimulant is tobacco is on the whole a better workman than his ganja-consuming brother.

I hold the same view with respect to charas.

82. Evidence of BABU JOGENDRA NATH MOZUMDAR, Brahmin, Deputy Inspector of Excise, Darjeeling.

1. My experience and information are limited almost entirely to this district and specially in my capacity of an Excise Officer.

2. Yes, they are correct to my knowledge. Ganja, bhang, and charas are the names in use in Bengal. Charas is unknown in Darjeeling.

3. In this matter I have a knowledge of this district only. The hemp plant grows spontaneously here in various localities specially on the beds of the hill streams.

4. In this district the term bhang is generally used to denote this plant. The word ganja is also frequently used.

5. The plant grows wild generally up to an elevation of 4,000 feet above sea level and is often abundant by the side of streams.

6. Generally scattered in this district.

7. (a) Yes.

(b) I do not know.

(c) Yes.

(d) I do not know.

The hemp plant is cultivated in Bengal in a tract in the Rajshahi District, in the sub-division of Naogaon, which partly stretches into the Bogra and the Dinajpur districts. The produce

of this tract supplies the whole of Bengal, besides exportation to Assam, Kuch Behar and the North-West. The area under cultivation is over 2,000 bighas.

8. No considerable change for good. The area of cultivation was reduced a year ago on account of the high floods.

9 and 10. No personal knowledge.

11. Do not know.

12. In this district the plant is not cultivated, but when growing spontaneously is sometimes tended for the production of ganja. These plants are generally solitary and so no extirpation of the male plant necessary.

13. The cultivation is limited to the tract mentioned in reply 7, but I do not know why. There is no doubt, however, that there are some peculiarities in the soil of the tract which are not known to exist elsewhere in Bengal. The experiment of ganja cultivation was tried at Sibpur, but it failed in spite of all scientific precautions.

14. Ganja and bhang are prepared. I do not know how far charas is indigenous in Bengal. Import from Nepal and the North-West is resorted to for supply of charas. Ganja is prepared in the district of Rajshahi in the Naogaon sub-division.

Bhang is more or less prepared in every district. The ganja prepared gives supply to the whole of Bengal, besides export to other provinces. Bhang is prepared in small quantities for private consumption, and, under licenses, when required to be prepared in large quantities for sale.

15. [a (A)] The ganja seeds are sown in a wet ground and when the seedlings grow they are transplanted. They are cut after four or five months. The male plants are weeded out by experts, employed for the purpose. After a little drying, the leaves and flowering tops are pressed with foot or rolled, and ganja for smoking is prepared. Ganja is sometimes smoked by being mixed with tobacco leaves. [a (B)] The dried leaves of both the male and the female plants are either made into pills which are swallowed or mixed with sweets called majum or [a (C)]; they are powdered and mixed with water and the mixture is again sweetened by addition of sugar and milk for drinking. The resinous matter at the flower tops of the plant is charas, and is smoked with ganja. [b (A. B. C.)] Wild plants are subjected to the same process. In this district, however, the Nepalese people who alone are acquainted with the use of this plant use it always in smoking and do not know the preparations for eating or drinking.

16. Bhang is often prepared at home. It can be prepared from the hemp plant wherever grown. Charas is not prepared from the wild plants as they are never so vigorous as the cultivated ones. Even ganja cannot be prepared from the wild plants unless the plants are taken care of and tended.

17. Muhammadans are said to be mostly engaged in ganja cultivation, but the business is not confined to them.

18. Yes. Ganja, charas and bhang will keep for eight or nine months. It will, however, take some years for them to be entirely devoid of their intoxicating properties. Dampness is the agency which primarily deteriorates the properties of the hemp preparations. The storage of the articles should be made on a certain elevation from the ground and should be protected from damp as much as possible.

19. Yes, only for smoking.

20. A very small fraction of the people only smoke ganja and charas, and charas is still less used than ganja. In some of the districts, for instance in Darjeeling, charas is entirely unknown. But ganja is used in every district in Bengal; ganja is pre-eminently the thing of the poor and is mostly in use amongst sadhus, jogis, fakirs, bhakats, lower class labourers, mehtars, dhobis. Up-country people are more addicted to it than people of Lower Bengal.

21. Flat ganja is generally preferred.

22. Nepal charas was generally preferred but latterly Bengal obtains its supply of charas from Amritsar and Mirzapur in the North-Western Provinces.

23. No. But the Nepalese people do not know the preparation of bhang as in Bengal or the North-West. They prepare a crude sort of ganja which they call bhang and this they always smoke.

24. Bhang is used throughout the province, more or less amongst all classes of the people. The eating of bhang in pills or sweetmeats is a matter of fancy and convenience, but the drinking of bhang is the ordinary method of its consumption.

25. In Bengal the use of ganja, charas and bhang among the Bengali population is fast decreasing owing, among the upper classes, to a change of taste by the influence of English education, and among the lower classes, to an influence of the example of the upper classes. No perceptible diminution of its use among the up-country people.

26. Out of every 100 consumers are—

(a) 75,

(b) 5,

(c) 15 and

(d) 5, I should think.

27. *Vide* question 20. The excessive use of ganja is resorted to by those who have very little else to do. Companionship with ganja smokers is another cause of its inducement. It is said that the smoking of ganja produces a state of mind, when persons, who have by steady effort tried to do so, are enabled to concentrate their minds in divine contemplation. Hence Hindu ascetics are hard ganja smokers, but I think most of them fail to turn its use to that purpose.

28. (a) One anna or less, (b) two annas or more.

29. With ganja tobacco powders are sometimes mixed up in the proportion of 3:1. Dhatura is sometimes mixed with bhang to induce excessive intoxication.

Bhang massala contains cucumber seeds, black pepper, coriander seeds and some other substances. Where the massala is not obtainable, only black pepper, milk and sugar are added.

30. The drugs are mostly used in company and seldom in solitude. Females seldom use it. Children do not use it except in rare cases.

31. This is just like drinking of liquor and all other intoxicating drinks or drugs.

32. In Bengal during the Dashara and the Sivaratri festivals, and in the up-country during the Holi and the Sivaratri festivals, bhang is used by persons who are not habitual consumers. This is done from a religious point of view. The quantity drunk is very small and not taken with a view to induce intoxication. Those who are habitual drinkers consume in excess at these times. The religious part of the consumption is not injurious, as it is only nominal.

33. The consumption of charas is abhorred by the public. That of ganja is looked down upon. The use of the bhang in moderate quantities is allowed though not approved of except at festivals. The custom of worshipping the hemp plant is not known to me.

34. There is no doubt that there will be serious privation for a time but that will be temporary. The after-effects of such foregoing will be salutary as is seen in the jail population of Bengal.

35. Yes. I don't see why it would not be. It could not be illicitly consumed with that ease which attends on the illicit use of liquor, for the former would necessitate the rearing of some plant on a fixed spot for months together, while liquor can be made in an hour. The discontent would certainly be serious but it could not amount to a political danger. Some provision should, however, always be made to meet the religious portion of the consumption. If the hemp drugs are prohibited, a portion of the consuming population will resort to alcohol and opium.

36. Alcohol has to some extent taken the place of the hemp drug, as the people are imbibing a taste for the former intoxicant.

37. The former are more acute than the latter.

38. No marked difference except that the flat ganja is a little more powerful.

39. The smoking directly affects brain, while drinking affects the whole system in a milder form; for the former acts through the smoke that does not pass to the lower parts of the body but has a tendency to go upwards, while the quantity drunk or eaten goes down to the stomach and after dilution there acts through the system. On the other hand, the effect of the smoke is less durable than the effect of the article itself assimilated into the system.

40. Ganja is used as a medicine for itches and in treating cattle diseases. Bhang leaves for treating eye diseases. The Nepalese use bhang extensively for the treatment of their cattle.

41. (a) Yes.

(b) Yes.

(c) Not known.

(d) Not known.

Occasional use is referred to.

42. The moderate use of bhang is not injurious though not altogether harmless. The other forms are certainly injurious. Even in bhang the habitual moderate drinker may be singled out from a company on account of a certain vacancy in his demeanour.

43. Yes.

44. The immediate effect of smoking ganja is stupefaction for a few moments, and then a pleasurable sensation in the system owing to intoxication. The effect lasts for an hour or so. Those who are habitual and hard smokers, feel an excessive longing for it after the lapse of a few hours.

The use of bhang is more refreshing at first and lasting in its effects. With occasional drinkers the intoxication continues for two to three days. There is a tendency to excessive laughter which oftentimes betrays the drug one has used. After a few hours the thirst for water is simply parching and the pain excessive.

Both ganja and bhang excite hunger. Both have after-effects to occasional consumers and permanent effect on the constitution of habitual consumers. A ganja-smoker can be singled out by the appearance of his eyes easily from a crowd. This shows the affection of the brain.

45. (a) Yes. It makes one dull and somewhat crazy.

(b) Yes, to some extent.

(c) It excites hunger at first and afterwards causes loss of appetite.

(d) I have heard of such cases but have not known any.

(e) Yes, laziness. It excites passion during intoxication.

(f) Insanity is induced in some cases which becomes permanent unless the habit is checked at the beginning. The symptoms may be re-induced. I do not know of any specific case.

46. Same as in question 45.

47. No.

48. I have known of no such case.

49 and 50. Yes. It is generally used by the male sex for sustaining their manly powers.

Sometimes used by prostitutes. Use of the drugs for this purpose is more injurious than as an ordinary narcotic, as under its influence the constitution is made to undergo greater exertions than nature would warrant.

51 and 52. Ganja and other preparations of the hemp plant have less connection with crime than alcohol. They are not in the way of exciting people to crime.

53. I have not known of any such case.

54. I do not think they are, except for purposes of debauchery.

55. If any one is willing to effect this he would most easily do it by opium, and I do not therefore think ganja is administered to any victims of criminals.

56. Bhang is mixed with sugar to increase its power of intoxication and with sugar and milk to give taste to it. Dhatura is used by hard drinkers only for personal consumption. It is administered to others only in cases of bad motives.

57. I have not known any such case.

58. The excise administration in respect of the hemp drug has been working well.

60. I don't think any change necessary.

61. I do not know much about charas.

62. I do not think that any attempt at controlling the cultivation of the plant for the production of bhang, any more than at present, would be feasible.

63. I think the limit of retail sale might with advantage be reduced to one chhattack instead of one poa as at present. The high limit of a poa is quite unnecessary. A man consumes four-anna worth of ganja in a day at most and one poa is worth Rs 5 at annas 4 a tola.

64. No, they are working satisfactorily.

65. These articles seem to me to be sold very cheap, in consideration of their power of intoxicating, as compared with alcohol. The duty might with advantage be raised even higher than at present. Relatively amongst themselves the taxation is reasonable.

66. Yes. If the same rate were applicable to all kinds, every kind of ganja would be required to be reduced to the same form, viz., to chur. The twigs make the difference in weight, and so long as the twigs exist the different rates must exist too.

67. *Vide* question 65. I think the tax should be increased.

68. Yes. I do not think they should be allowed. The consumption on premises should be prohibited on the same principle that the consumption of opium is prohibited.

69. Shops are generally opened in a locality by a request from the people of the locality for meeting their wants. I think there is no harm in the local public opinion being taken by official notice of an ordinary kind.

70. No. There is very little of importation of the drugs from Native States into Bengal, except smuggling from Nepal to some extent.

The drug in general use, without tax, is bhang, which is generally prepared by people at home and consumed without payment of duty. The quantity of bhang sold in licensed shops forms but a small fraction of the total quantity consumed. Shops for the sale of bhang might, with advantage to the revenue, be multiplied very largely.

Oral evidence.

Question 1.—I have been twelve years in the Government service. I was four years in the Educational Department and eight years in the Excise Department. My whole service has been passed in the Darjeeling District.

Question 2.—I have found the wild plant in the Rangeet and Teesta Valleys on ground by the sides of streams which was overflowed at times. The ground would be submerged for two or three hours at a time. I have found the plants growing singly in the gardens of villagers. In those places it was not of spontaneous growth, but the seed of the wild plant must have been sown because the stuff produced is inferior, and the plant resembles the wild plant, though the flower heads are more full and thicker. It is impossible to say if the seed was actually sown. Prosecutions were instituted when such cultivation was discovered. The plants grew the height of a man. The wild plant is a little smaller. I have seen the plant in the jungles, though not very far from the streams. By the main streams it grows thick, but thinly by the smaller streams. I have never heard of the wild seed being collected to be sown. The growth is found in many places, but I cannot say that is very abundant. There have not been many prosecutions, only ten cases in the last ten years. Recently the prosecutions are becoming more numerous, and there were three or four in the last year.

The hill people do not themselves consume the produce of the wild plants, but they give it to their cattle; so I am informed. If they used the

wild plant themselves there would be no need to grow the plants in their gardens. The garden growth indicates a certain amount of illicit consumption. Excised ganja is used in the district; bhang is not. There is no shop for the sale of bhang, as there is no demand for it. The ganja is mostly consumed by the foreigners; of the hill people, only the sadhus and sanyasis use it. It is consumed by the coolies, who are not Nepalese, on the tea gardens in the Terai. I am Excise Deputy Collector for the whole district.

I have seen four or five cases of administration of the drug to cattle in the whole course of my experience, and I have heard that it is so used. The flower and leaf are used in the dried state. I have never heard that cattle eat it of themselves.

Question 44.—I think I could single out excessive ganja smokers from a crowd. The eyes become somewhat red. Liquor also causes the eyes to grow red, but the redness lasts only as long as the effects of the drink last. In the case of ganja the eyes remain permanently red, *i.e.*, with an habitual smoker. A short interval between the indulgences in ganja will not allow the eyes to lose their redness. With drink on the contrary the redness does not last. A ganja-smoker who has indulged in the habit for two or three years will not lose the redness even though he abstains from smoking for two or three days. I can't say that I have seen an habitual excessive smoker drop his habit for as long as that, but I have seen one case in which such a man stopped for one day. I particularly remember only one case. A man intoxicated with drink I should distinguish rather by his intoxicated gait than by his red eyes.

83. *Evidence of BABU DIGENDRA NATH PAL, Kayasth, Deputy Inspector of Excise, 24-Parganas.*

1. As Excise Inspector and Deputy Inspector of 24-Parganas District, as special Excise Officer of all the districts of the Presidency Division, as Excise Sub-Deputy Collector of Gaya District, and Police Sub-Inspector in the districts of Backergunge, Bankura, and Balasore, my experience extends over fifteen years, and I had opportunities of obtaining information regarding the matters connected with hemp drugs.

2. Yes. Siddhi or bhang, ganja or tamak and charas in the districts I have worked.

3. Jessore, Khulna, Nadia, Murshidabad, Backergunge, 24-Parganas. In Jessore it is abundant.

4. Bhang or siddhi. Yes.

5. No special conditions of climate or soil, etc., are necessary to the growth of the wild hemp. I think it may grow anywhere in Lower Bengal.

6. Ordinarily dense.

7. Yes; but not in the districts I have worked.

10. No. The ganja cultivators are of the same class as other agricultural people.

11 and 12. No, so far as I am aware of.

13. The cultivation is restricted to the districts of Rajshahi, Bogra, and Dinajpur, known as Naogaon ganja mahal. I think a soft loamy soil with adaptability for irrigation is best suited for producing ganja. Its cultivation, I think, would be impossible in marshy land and hilly country.

14. (a) In Rajshahi, Bogra and Dinajpur Districts.

(b) No.

(c) Illicitly prepared in the districts I have served; but, except in Jessore, the quantity of such preparation is very small.

15. Only from cultivated plants different sorts of ganja is manufactured. I do not know much of the preparation of ganja and charas. Siddhi or bhang is prepared illicitly from the wild plants. The leaves are removed from the plants when they are flowering and then dried in the sun. After this process it is powdered and drunk by people by mixing it with water, milk, sugar and spices. Ganja and charas are smoked only, generally by mixing with tobacco.

16. (a) As far as I know, it is generally prepared by the people in their houses in those districts I have worked.

(b) Yes.

(c) No.

17. Ganja is prepared by the ordinary cultivators, both Hindus and Muhammadans. Siddhi is illicitly prepared by all classes of people who drink it. I do not know what classes of people prepare charas.

18. Yes, they deteriorate and lose their effects. Ganja and siddhi last two to three years and charas four to five years. The evaporation of the narcotic matter causes deterioration. If the drug is kept hermetically sealed in tin boxes, I think it might prevent deterioration.

19. Used only for smoking, as far as I know.

20. Charas used to be smoked before by both upper and lower classes of people; now its use is confined to a limited number. The consumption of charas in the district of 24-Parganas is not more than 30 seers per annum, and the number of smokers is not more than 300. Ganja is smoked generally by all labouring class and a limited number of upper class. I think about 75 per cent. of the labouring class use ganja. But the percentage of upper class of people who use ganja is not even 5 per cent.

21. In 24-Parganas round ganja is preferred; but in other districts where I have worked flat ganja is preferred. There is very little consumption of chur on account of its price being higher than these two. I do not think there is anything special in any of them for which preference is given. It is only a matter of likeness to the taste.

22. Foreign. Nepal charas imported from Amritsar.

23. No.

24. Bhang drinking is prevalent among all classes of people. It is specially used by the inhabitants of Behar. I think about 40 per cent. of the people drink siddhi or bhang.

25. The use of licit ganja, charas and siddhi is on the decrease. Many lower class of people, specially in 24-Parganas District, who can afford, have taken to tari, as it both stimulates and satisfies hunger. I believe also many of the upper class people who used to smoke charas and drink siddhi have now taken to wines and spirits, as they consider them better in exhilarating effect.

26. (a) 70 per cent.

(b) 4 per cent.

(c) 25 per cent.

(d) 1 per cent.

27. These are mainly taken from lower class of Hindus and Muhammadans, such as Bagdi, Podh, Behara or Kahar, or Chamar or Muchi, Mallah, Dome, Dhangar, Dulia, Mehtar, Boistab, sanyasi, musician, Koiborta. They are generally moderate consumers. Hardship and a life of asceticism are the principal causes which lead to practice.

28. *Ganja.* *Charas.* *Siddhi.*

(a) Two annas weight, Three annas weight, One tola, price price two pice. price one and half anna. two pice.

(b) One tola, price One tola, price eight Two-half tolas, four annas. annas. price five pice.

29. Ordinarily with ganja and charas, prepared tobacco is mixed, and with siddhi, spices, sugar and milk. I am not aware of anything exceptionally mixed. I have heard dbatura seeds are used with ganja to increase its intoxicating power, but I have not seen any one to use it. In case of tobacco with ganja and charas to soften the narcotic effect and to give also a better flavour; spices, etc., are used with siddhi to improve taste, and also to increase its intoxicating effect. I do not know much of bhang massala.

30. (a) Ganja and charas are smoked generally in company, ordinarily consisting of two. They are practised by very few in solitude. I think the percentage of consumers who practise in company is not less than 90. No privacy is observed in case of drinking siddhi.

(b) It is mainly confined to male sex and not to any special time of life.

(c) No.

31. (a) Yes.

(b) No.

(c) Not to the same extent as alcohol or opium.

32. The consumption of ganja and charas are not required by any social or religious custom. Bhang is drunk as a religious, and more as a social, custom on the fourth or last day of Durga Puja, as it is believed success betokens the drink, and the name itself implies success. It is popularly believed to have been the favourite drink of god Siva, and therefore used as an offering to him by the devotees. It is not essential that bhang should be drunk in connexion with an invariable custom. The use is generally temperate, and there is no likelihood of its leading to the formation of a habit.

33. The smoking of ganja is held in disrepute but such is not the case with charas smoking or siddhi drinking. It is popularly believed that Lakshmi, the goddess of wealth, leaves as soon as one begins to learn ganja-smoking. The sentiment, I think, due to the fact of ganja-smokers being generally rough, mean and shabby in appearance. I am not aware as to any custom of worshipping the hemp plant on any occasion by any sect of people.

34. Yes. The labouring class of the population use ganja or charas as stimulant for hard work. They cannot possibly give up the habit without some substitute. Bhang again could not be given up by the habitual consumers without aggravating the complaints to prevent which they had recourse to its use.

35. It is feasible to prohibit the use of charas, but not of ganja or siddhi. These two may be consumed illicitly. I doubt if the prohibition could be enforced with regard to them. The prohibition would occasion serious discontent among the consumers, but that would not amount to a political danger. The prohibition would be followed by recourse to other deleterious drugs.

36. I believe alcohol has to some extent superseded the use of siddhi and charas amongst the better classes. I attribute this because as stimulant alcohol is considered to be superior to both. The use of these drugs is gradually diminishing among the upper classes. For instance, on the last day of Durga Puja, siddhi is not generally taken, but instead of it some youngsters take liquor. Tari to some extent has taken the place of ganja among lower class of people, for it stimulates and at the same time satisfies hunger, although little costly.

37. Yes. The effect of charas smoking is considered to be milder.

38. No.

39. Smoking, I think, is less injurious than drinking. The reason is that smoking produces a strong instantaneous effect, and much cannot be used at a time in this form; but drinking is decidedly an easier method of consuming a large quantity at a time. The effect of smoking does not last long, but that of drinking continues for hours.

40. (a) Yes.

(b) Yes.

41. (a) Believed to be both.

(b) Yes.

(c) Yes.

(d) Concentration.

Labouring class, 75 per cent. of them. The moderate use is referred.

42. The moderate use is harmless, as it has no after-effect on the system.

43. Yes.

44. (a) It invigorates.

(b) Yes.

(c) Yes.

(d) No.

(e) No.

(f) One hour in case of ganja and charas, and three to four hours in case of siddhi.

(h) Produces longing in case of habitual consumers.

45. (a) No.

(b) In case of intemperate use it does.

(c) No.

(d) Yes, in case of intemperate use.

(e) No.

(f) The moderate use does not deaden the intellect or produce insanity. It is said that adulteration of the drugs with other poisonous ingredients, such as dhatura, etc., produces insanity. During the course of my inspection of ganja, etc., shops for the last ten years, I frequently met several insane persons who are in the habit of smoking ganja. Their object of frequenting the shop is to beg ganja from the purchaser. The general impression is that their insanity is due to ganja smoking. In most cases I found on enquiry that their insanity was due to family misfortune, etc., and some have taken to smoking ganja after being insane. In only few cases no cause could be ascertained, and their insanity may be ascribed to the excessive use of the drug. All the insane persons I met were temperate, and they could tell their cause of insanity to some extent. I am of opinion that persons suffering from mental anxiety or brain disease use the drug to obtain relief. I know of one insane whom I lately met at Ghugudanga shop. This man was a station master before; but having had some family misfortune he became insane, and now has indulged in the use of the drug.

46. No remarks.

47 and 48. No.

49 and 50. (a) Yes.

(b) It is used so by the lowest class of prostitutes, who frequent mélas or fairs.

(c) I am not aware of.

(d) No.

51, 52, 53, 54 and 55. No.

56. I have no personal knowledge of admixture of other substances than what I have already noted.

57. I do not know that ganja and charas are eaten or drunk.

58. The Excise Administration of Bengal with respect of hemp drugs is working well; but I consider it still capable of improvement in some respect.

59. The following are some of the suggestions indicating the direction in which improvement is possible:—

1. At present there is no sufficient check over the warehouses. There is great difficulty to weigh ganja accurately in the stock

on account of bag, straw, ropes, etc. One seer pack, like opium cake, should be made, if possible.

2. The warehouses must be all built in the kutcherry compound at the expense of Government in a standard plan, and rent should be charged from the goladars.

3. The warehouses must be in charge of some responsible officer. No deliveries of ganja should be made by any ministerial clerk or muharrir and executive officer below the rank of Sub-Inspector or Superintendent drawing less than Rs50. The present rule is not practicable, and is therefore not strictly observed.

4. There should be only one sort of ganja when there is no difference in narcotic effect of each. The different sorts only increase confusion in the stock and account.

5. The duty of the drugs should be increased. I think the duty of ganja should not be less than Rs8, that of siddhi Rs1, and that of charas Rs10. The present rate of duty is not sufficient, for now one pice worth of any of these drugs can intoxicate a man.

6. The quantity of ganja and siddhi which a person is allowed to possess, should be reduced from twenty tolas to five tolas. This will minimize smuggling and at the same time will act as prohibition to the consumer, who has a tendency to go to excess.

62. Yes, the cultivation should be controlled. This would not be wholly feasible, but if special officers are appointed to watch the cultivation of hemp plant for the production of bhang, then I think there will be a great check.

63 and 64. No.

65. The taxation is reasonable with reference to each other, but not to alcohol or other intoxicants. I think their duty is capable of being increased. I have suggested this in my answer to question 59.

66. Yes, for flat and round have twigs which the chur has not. If different sorts of ganja are kept, then they should be taxed in proportion to the narcotic matter that each is found to contain.

67. Yes, as remarked above.

68. There are licensed shops for the sale of these drugs; but ordinarily these drugs are not smoked or drunk in the premises of the shop. The shops are not disreputable; generally *mudi* shopkeepers are the licensed holders of these shops.

69. Ordinarily the wishes of the people are not consulted or considered when a shop is opened in any locality. On the application of vendors and local inhabitants, licenses are granted after due enquiry at the auction settlement with the sanction of the Board. I do not think it is necessary to consult or consider public opinion, as these shops are not a nuisance.

70. No. Yes, duty is paid in respect of ganja and charas, but not of siddhi. The latter is used to some extent illicitly, but the use is not general.

Oral Evidence.

Question 1.—I have been sixteen years in the Government service in Bengal. I was first in the police and then joined the excise, and have served in the latter department for twelve years in Jessore, Nadia, Khulna, Murshidabad, the 24-Parganas, and Gaya.

Question 14.—The illicit preparation I refer to in this answer and in 15 and 17 is that of the wild bhang which grows abundantly in some districts. Up to 20 tolas such preparation is not illegal, and by illicit, therefore, I mean preparation which is apart from excise arrangements.

Question 34.—The complaints I refer to in this answer are diarrhoea and other bowel complaints. If deprived of bhang these people will not find other remedies ready to hand. Native physicians prescribe bhang for these complaints. I have known many people to have had bhang prescribed for them to relieve their complaints, and to have in that way learnt the habit of taking the drug, and when they give it up diarrhoea immediately sets in. I have known some eight or ten cases of this kind, the people themselves having told me that the drug was prescribed for them. I also know cases in which people have taken the drug to relieve their complaints without having had it prescribed for them. In view of the opinion I have now expressed regarding the difficulty of leaving off bhang in certain cases, I wish to change my answer 31 (b) from "No" to "Yes." It is these consumers' statement that if they stop taking bhang they get diarrhoea.

Question 35.—Another deleterious drug that would be taken if hemp was rendered inaccessible is dhatura. I know of no other. I mention dhatura because I hear that many people already use the seeds and flower mixed with siddhi or ganja. I have never seen it used myself.

Question 39.—It is easier to take large quantities at a time by drinking than by smoking. I have not seen Dr. Prain's report. In comparing smoking and drinking I am speaking of the same drug in both cases, either bhang or ganja, and not bhang in one case and ganja in the other. This is a purely theoretical conclusion; I have never made any experiments.

Question 45.—I did not make detailed enquiries; but after I got the Commission's questions I began enquiring about insane people whom I met near the ganja shops. I questioned the men themselves and other frequenters of the shop. I myself made enquiries in four or five cases. My Sub-Inspectors also made enquiries. I believe I have met four or five such insane persons, and the whole paragraph of my answer is based on these instances. All my general conclusions in this paragraph regarding insanity are based as far as personal experience goes, on enquiries made from insane persons and other frequenters of ganja shops in regard to four cases. And in regard to about fourteen or fifteen cases I received information from Sub-Inspectors of Excise, who said they had made similar enquiries with like results. I think this quite sufficient ground for forming an opinion. This opinion is that in most cases of alleged ganja

insanity, it is due to some other cause, but in only a few cases it is due to the excessive use of the drug. The last paragraph of answer 45 was not revised by any one before submission to the Commission. It was not written after consultation with any one. The ideas are entirely my own.

Question 59.—By the word *intoxicate* I should mean *making insensible*. That is not my meaning in this place. I should now prefer to use the word *exhilarate*. My meaning is that, although there is no harm in a man being exhilarated, he should not be exhilarated at too cheap a price, and therefore the tax should be raised. I consider that for hard work a man needs to be exhilarated, and that it is no harm for any one to be exhilarated. The vernacular word *nasha* means *exhilaration*, and *matwala* or *matlami* means drunkenness. A drunken man is called *matal*.

Question 62.—There is no cultivation of the plant as far as I know for the production of bhang. I allude in this answer to the wild growth.

Question 64.—Zamindars and their gumastas and naibs frequently apply that shops should be opened in certain localities. I have had such cases. I have had application from other people asking for shops to be opened. The latter are not respectable people. Zamindars apply because they think it will make their tract flourish. It is in the Sunderbuns especially that the zamindars file such applications. They find that people will not come and live on these marshy tracts without the drugs, and the people are addicted to ganja and liquor and other intoxicants. We grant the application if we find that there is no shop in the locality. I do not remember how many have been granted in the last three years, but two or three may have been granted for ganja and many for liquor. The enquiry is made when the petition is presented, and it is only if it is decided to open a shop that a settlement is made. The subject of the enquiry is to see if the neighbouring shops will be affected by the new shops. In cases of liquor shops, enquiry is made to see if the local inhabitants object to the opening of the shop or its site. Such enquiry is not made in regard to ganja, because the ganja shop is not a nuisance, and for my part I think it is unnecessary.

(Two days later witness appeared and said :—)

I have searched the records of the last three years, and have been able to trace only three petitions for the opening of shops submitted by private persons, and none from zamindars. Two were rejected and one is under inquiry. I do not include in this applications of would-be licensees to open shops. There are five petitions on the register for these years which I could not trace, and cannot therefore tell what they were, *i.e.*, whether they were from would-be vendors or not. I remember that there were two cases of zamindars who applied to the Excise Deputy Collector for shops last year (1892-93), *viz.* (1) Bholanath Banerjee, and (2) the agent of Khundu Babu of Ghat Kula. I do not know precisely how they applied, whether orally or in writing. No shop was granted, and no papers are forthcoming in their cases.

84. Evidence of BABU SIB CHUNDER SOOR, Satgope, 1st Assistant Supervisor of Ganja Cultivation, Naogaon, Rajshahi.

1. My past services as clerk and surveyor in the late ganja inquiry of 1876 under Special Deputy Collector, Babu Hem Chunder Kerr, whom I attended at the several inquiries and different experiments made by him for ascertainment of the various items of information mentioned in his report, and my present service as Assistant Supervisor of ganja cultivation, extending over a period of about fifteen years, have afforded me opportunities of obtaining information regarding the matter connected with the hemp drug (ganja), and with the help of this information I frame the following answers.

2. The definitions given by Dr. Prain may be accepted for Bengal. Bhang is locally called bhang, siddhi or patti. Charas is called charas. But it is not prepared in the ganja mahal. The resinous matter that sticks to the hands and feet of the persons at the time of reaping the plants and manufacturing them into ganja is not collected but washed away, the quantity being so small that it seems hardly worth collecting. Dr. Prain, whom I attended at his experiments, made an attempt towards this direction, but in vain.

Ganja.—There are four varieties of ganja, and they are known at Naogaon by the following different names:—

- (1) Mota-dal, or flat large twig ganja.
- (2) Mebi-dal, or flat small twig ganja.
- (3) Jessori, noray, gol, or round ganja.
- (4) Chur, phatak, or broken bits of ganja, whether obtained from the flat or the round sort.
- (4a) Rora, or broken bits of round ganja only.

3. I know hemp plants grow spontaneously in the districts of Hughli, 24-Parganas, Rajshahi, Bogra, and Dinajpur. I think they are abundant in Rajshahi. They grow around the dwelling houses, in waste lands around the villages, and in and about the spot where ganja *chatars* (manufacturing yards) are held. They grow to the height of about six to eight feet.

4. It is known by the names of bhang, siddhi or patti. These refer exactly to the same plant.

5. I believe no special conditions of climate, soil, rainfall, elevation above the sea level, etc., are necessary to the growth of the wild hemp. It may grow all over Bengal. It grows all the year round. It dies soon after flowering or as soon as seeds have ripened.

6. The growth of the wild hemp plants is ordinarily dense.

7. (a) Yes.
- (b) No.
- (c) No.
- (d) No.

The cultivation of ganja is carried on in a small tract of land called the ganja mahal. It comprises parts of the thanas Naogaon in Rajshahi,

Mahadevpur in Dinajpur, and Adamdighee and Nawabganj in Bogra. It is included within a radius of about fourteen miles. The cultivation is carried on in some 200 villages scattered all over the tract. The area cultivated in each year is 2,500 bighas on an average.

8. There was not any considerable increase or decrease in area under ganja cultivation in any of the years since 1879-80 to 1892-93, except in the years 1884-85 and 1891-92. In 1884-85 the cultivation decreased. The decrease was due to the fall in the selling price of ganja in the previous year, which discouraged many to grow ganja. In 1891-92 it increased. The increase was due to the rise of the price of ganja; the high flood of 1890-91 destroyed the crop, and the price rose very high, which induced old cultivators to cultivate more lands, and tempted many non-ganja cultivators to betake to its cultivation.

9. The particulars regarding the method of the cultivation of ganja are minutely described in Babu Hem Chunder Kerr's report. I am not able to give a more minute description of it. No change in the mode of cultivation has taken place since the publication of the report. The cultivation extends over twelve months, from February to February, taking the selection of the field in February as an initial process, to the reaping of the crop in February as the final process. In paragraphs 38 to 53 of Hem Babu's report the description of the cultivation is given. I submit herewith a brief chronicle of ganja cultivation.

The cultivation of ganja extends over twelve months from February to February.

February.—The land for the next crop is selected. It is dressed with fresh earth taken out from the surrounding ditches or from some nearest low lands.

March.—The land is ploughed up some four to six times at an interval of four or five days, to free it of all herbage and stubble.

April.—The same.

May.—The same. Sods from the sides of the field are cut along with the grass and weeds and thrown on it. The edges of it are then bound anew with fresh earth taken from the side ditches.

June.—The land is ploughed thoroughly and harrowed with ladder. Shallow channels for free discharge of rain water are made with the ploughshare.

July.—The land is manured with cow-dung and house-sweepings preserved throughout the year. It is repeatedly ploughed and harrowed. Shallow channels are excavated for free drainage of rain water. The seed bed is ploughed and harrowed.

August.—The same. Seeds are sown broadcast.

September.—The ridges are formed to transplant seedlings on. The seedlings are gathered and transplanted.

October.—The field is weeded out of grass.

November.—The ridges are cut down. The roots of the plants opened, and powdered oilcake and cow-dung strewn round the roots of the plants. The openings at the roots closed up with fresh earth mixed with manure, and the ridges built again, beaten hard with a piece of bamboo to

make the surface firm. The plants are trimmed of their lowest twigs and branches. They are examined and the males destroyed. The land is irrigated.

December.—The trenches between the ridges are ploughed and harrowed. The ridges are rebuilt with cowdung and oilcake powder mixed with fresh earth. The land is irrigated. The male plants are destroyed.

January.—The land is irrigated. The male plants are destroyed.

February.—The plants are cut and manufactured.

10. They are of the same classes as the other agricultural cultivators.

11. I am not aware of any instance of ganja plants ever raised from seeds of wild hemp.

12. I know of no place where the wild hemp is specially cultivated for the production of ganja.

13. Under certain rules the cultivation of the hemp plants for ganja is carried on in the tract of land called the "ganja mahal." It is restricted, I believe, in other parts of Bengal. This tract lies partly in the district of Rajshahi, partly in Bogra, and partly in Dinajpur. It is included now within a radius of about fourteen miles. In 1876, when the ganja inquiry was made by Babu Hem Chander Kerr, the extent of the tract was larger, the radius being about sixteen miles; and ten years before that, about twenty miles. The gradual reduction in the extent of the tract was due to the fact that by the removal of jungles in the villages not far off Naogaon, more lands became gradually available for cultivation, and more ganja was produced. Purchasers having ganja near Naogaon do not naturally like to go to distant villages for their supplies. So the cultivators of the villages in the remote north, south and east of the tract, failing to find purchasers to sell their drug, have ultimately given up the cultivation and betaken to the cultivation of onion, sugar-cane, jute, etc., which are not less profitable.

Why were they selected?—This tract was not at first selected deliberately for the cultivation of ganja. The cultivation commenced here accidentally, and certain combination of circumstances made it flourish here. I learn that, so far back as the middle of the 18th century, the cultivation began in the adjoining villages, Balubhara in the Bogra district, and Moradpur in Rajshahi. The cultivation proving remunerative was gradually extended to other villages of those districts, as well as to some of the Dinajpur District bordering on them. The cultivation attracted the notice of the *Sarkar* subsequently, and Abkari Division was opened at Naogaon in 1845, and the existing ganja supervisors' office in 1854. The cultivation went on unrestricted until the enactment of Act II (B. C.) of 1876.

Climate.—Dry climate is necessary for the cultivation of ganja.

Soil.—Lands are always selected for the cultivation of ganja after looking into the convenience of irrigation. High and dry lands are necessary for cultivation. Low and swampy lands are unfit for it. *Poli* soil or light sandy loam is the best. The plants on the *poli* land grow very big, become sufficiently bushy, and bear forth thick stout ganja yielding flowers. The cultivation of ganja is mostly carried on on this kind of land. *Kheary* or clayey soil is not so good for ganja cultivation as *poli*. *Kheary* land is hard and dry. It requires more frequent ploughing and constant irrigation. The plants on the *kheary*

land become generally of stunted growth, slender, and bear forth short, thin and scattered flowers. The colour of the ganja manufactured from them lends a reddish shade, and is liked by purchasers. Very little *kheary* land is cultivated, because the cost of cultivation becomes greater.

Rainfall.—Moderate rainfall at all stages of cultivation from the transplantation of seedlings in September or October, to the flowering of the plants in December, is highly beneficial. But rain on the day of transplantation or the day following and after full flowering of the plants in December is baneful.

I do not know in what part of Bengal the cultivation of ganja is impossible.

14. (a) Yes.

(b) No.

(c) No.

Ganja is prepared in the ganja mahal. It is prepared from 7,000 to 9,000 maunds.

15. I know the particulars regarding the methods of the preparation of the Naogaon ganja from the cultivated plants, which is used for smoking. Three kinds of ganja are prepared at Naogaon, *viz.*, flat, round and chur. The method of preparing the flat is different from that of the round; chur ganja has no separate process of manufacture. The blades of ganja that drop down at the time of the manufacture of flat or round are collected as chur ganja. Chur is also nowadays deliberately made by breaking twig ganja.

Flat ganja manufacture—1st day.—For the manufacture of the flat sort of ganja the plants are cut in the morning, and carried to the *chatar* (manufacturing yard), which is held in an open grassy field, with a hut or two raised therein for accommodation of men and protection of the drug (manufactured). The plants are laid out to the sun on the grass of the *chatar* till about 1 or 2 o'clock in the afternoon. They are taken up one by one, and cut to the lengths of one to two feet. The non-ganja bearing twigs and bare stalks are now thrown away, and only the ganja bearing twigs or the selected stalks are laid on the *chatar* yard for exposure to dew.

2nd day.—At about noon, or when the twigs have assumed a withered-up appearance, the twigs are collected and formed into bundles of five to ten twigs, and placed in a single layer in a circular form over a *durma* mat spread on the *chatar* yard, with the top of the plants or twigs pointing to the centre and overlapping each other. The circle formed is generally of about 14 feet in circumference. On this three or four men ascend, holding each other by the hands, and commence treading and trampling upon the twigs. They stamp and press down the twigs with one foot, while they hold them with the other. The pressing is continued for about five minutes, or to the time the ganja bearing flowers on the twigs do not assume a flat shape. A man places a fresh layer of bundles over the first layer, and trampling goes on. When the second layer is completely pressed, a third to the fifth or sixth layers are placed and trampled on till the stack rises to the height of about 2 feet. The men get down, and a mat or two are spread on it. Two or three men sit on the stack, or some heavy weights are placed thereon.

About half an hour after, a man spreads two or more mats close to the stack. One or two men take out the twigs or bundles by twos from the stack, and holding one in each hand beat against

each other over the mat. The seeds and the crumbled leaves fall off. The bundles are then placed in a layer on one mat, and they are pressed and trampled as before and a new stack is formed from the first. It is, as before, covered now with mats and weights placed thereon.

After some time some mats are spread on the *chatar* yard, and bundles taken out from the stack are laid out on them in a line, and the men commence, with their one foot, pressing the bundles from the bottom to the top of the twigs, holding the same with another. The process is repeated several times. The twigs are turned upside down, and pressed and trampled as before. When the trampling is finished, the twigs are kept in rows in a slanting posture over a bamboo placed horizontally on the yard (*chatar*) and covered over with mats for the night.

3rd day.—On the next morning the cultivator or his men pick up the twigs one after another and pile them up in a stack and put pressure as before.

At about noon the cultivator takes out twigs from the stack, exposes them to the sun for about quarter of an hour, and presses gently with hands and feet to remove the useless leaves.

When the cultivator finds that the leaves have been sufficiently removed, the twigs are tied into bundles of ten *mota antees* or into bundles for sale and export.

At the time of removing the superfluous leaves and tying the bundles, a few blades of ganja drop down. These are collected as flat ganja chur.

The flat small twig ganja has no separate process of manufacture. In tying bundles for export, the large twigs are used in forming large twig bundles, and the small ones into small twig bundles.

Manufacture of round ganja.—Round ganja is prepared from the superior kind of the crop. The plants for the manufacture of round ganja are generally cut in the afternoon. They are brought to the *chatar* and exposed to the declining ray of the sun and the dew of the succeeding night.

2nd day.—In the morning they are cut to the lengths of 1 to 1½ feet, and dried in the sun till they have assumed a withered-up appearance.

At noon a line of mats is placed below a horizontal bamboo, supported by two posts of about 4 feet high. On both sides of the bamboo some ten to fifteen men stand over the mats in two rows facing each other and holding the bar. Some ten to fifteen twigs are placed under the feet of each man. They commence to press and roll the twigs with their feet. The process is continued for about ten to fifteen minutes. The men then take up the twigs in their hands, and shake off the leaves and seeds. The twigs are again put under the feet and rolled on again till the twigs have assumed a roundish shape. The twigs are then put to the sun for about quarter of an hour or till they have dried a little. The men then sit on the mats, and, taking in their hands the twigs, press them hard with their hands for about five minutes. The twigs are repeatedly exposed to the sun and taken up and pressed with the hands till sunset, when they tie the twigs into loose bundles and keep them under cover of mats for the night.

3rd day.—On the noon of the following day the men unloose the bundles and cast to the sun the twigs piece by piece. When they find that they have well dried, they are taken one by one and pressed with the hands.

The work of tying up bundles then commences. The tying can be done by experts only. The twigs are arranged one after another according to their lengths. The smallest ones are generally placed inside the bundle. The bundle is pressed hard with the hand and tied with a thin string at the stem, a portion of which is now cut off. In the portions cut off there remain blades of ganja. These are collected as chur. Chur is also collected from the bits of ganja that drop down during manipulation. It is also deliberately made from inferior ganja rejected at the time of tying up bundles. The chur of round ganja is called *rora*.

Ganja is not prepared for eating or drinking.

16. I have no knowledge of the method of preparing bhang. It can be prepared from the ganja plants, but the drink will be a little too strong.

I do not know whether ganja or charas can be prepared from the wild plant wherever grown.

17. The preparations of the hemp drug (ganja) is made by the low class Hindus, such as Kaibartas, Malakars, Napits, Charal, Koch, Jugi, etc., and by the Muhammadans. The proportion of Hindus is 15 per cent., Muhammadans 85 per cent.

18. Ganja deteriorates by keeping. It commonly loses its effects after two or three years. It keeps good with ordinary care for about two or three years. It deteriorates on account of evaporation of its narcotic properties or strength. To prevent deterioration, it might be kept in tin boxes hermetically sealed.

The answers given under this chapter refer only to the ganja manufactured at Naogaon.

19. Ganja is used only for smoking. I do not know of its any other use.

20. The lowest classes of Hindus and Muhammadans, such as fishermen, Kaoras, Methers, Domes, Muchis, Chamars, Mallas, palki-bearers, etc., smoke ganja. It is also smoked by udayins, sanaysis, bairagis, songsters, and by some high and middle class men.

About 75 per cent. people of the above classes smoke ganja.

It is consumed in all the districts of Bengal and Behar.

21. Ganja smokers prefer smoking that kind of ganja which they are habituated to smoke. The flat ganja consumers like the flat ganja, and the round ganja smokers the round. The round ganja consumed in Calcutta, 24-Parganas, Hughli, Burdwan, Birbhum, Nadia (Sudder), Cuttack, and Puri. The flat ganja is smoked in all other districts of Bengal and in Behar. Also it is consumed in Benares, Allahabad, Assam, Cooch Behar, and Nepal. It appears that the flat sort of ganja is preferred or liked for smoking by the majority of smokers.

The chur of round ganja is consumed by the smokers of the round ganja localities, and that of flat by the flat ganja smoking places.

22. I am not aware of the use of charas, native or foreign, here.

23. I do not know whether bhang is ever used for smoking.

24. I believe bhang is drunk by Beharis of all classes. I cannot say the proportion.

25. It appears from the exports that the use of ganja is neither increasing nor decreasing. It has been rather steady since the last fifteen years.

The increase of duty from time to time did not affect consumption. It therefore seems that it is capable of being taxed still higher.

26. I cannot give the proportion of the ganja smokers, as I could not gather statistics.

(a) More.

(b) Less.

(c) More.

(d) Less.

27. (a) The habitual moderate consumers are generally of the class of people called udasins, sanyasis, jogis, bairagis, tapasis, syces, fishermen, artisans, chamars, etc. Their number is the largest.

(b) The habitual excessive smokers are seen among the above classes as well as among the middle and lower classes of people. But their number is very few.

(c) The occasional moderate smokers are taken from the lowest classes of people, such as Dome, Bagdi, Kaora, Dhangar, Nunia, etc., as well as from the middle class people. Their number is not very large.

(d) The occasional excessive smokers are bairagis, mendicants, vagabonds, etc. Their number is very small.

The keeping of company with ganja smokers, a desire to increase lust in youth, an attempt to kill the hard labour of the day, and to ward off exposure, or the use of it as medicine, leads one to the practice of ganja-smoking.

28. The average allowance of ganja per diem to a habitual moderate smoker is about two annas weight. The cost of it is two pice.

That per diem to a habitual excessive smoker is one tola, and the cost of it is four annas.

29. The ingredient mixed with ganja is ordinarily tobacco leaf. Dhatura is not used. The object is to make the smoke sweeter and stronger.

I do not know of any preparation of bhang or ganja massalas.

30. Eighty-five per cent. of the smokers smoke ganja in company of two or three persons, and 15 per cent. in solitude. It is mainly confined to the male sex; but women of ill-fame of the lowest classes use it too. It is generally smoked by young men of the age of eighteen to forty-five. It is not usual for children to consume it.

31. The habit of consuming ganja is easily formed. It is not difficult to break off. The moderate habit tends to develop into excessive in some cases.

32. Ganja is not consumed under any social or religious custom. But bhang is drunk on the Bijaya Dasami day of Durga Puja. It is pounded into a fine paste, diluted with water, and drunk by all Hindus. Those who do not drink make a *phota* of it on the forehead, or where the two eyebrows meet. It is looked upon as a success-giving thing; hence its very expressive synonym is "siddhi," "the success, etc., giver." People carry a leaf or two of it when they start for any enterprise. It is refreshing. It is generally temperate. It is not likely to lead to the formation of habit.

33. The smoking of ganja is regarded with disrepute by the people, but not the drinking of bhang. There is no social or religious public opinion in regard to the practice. The use of ganja is generally in disrepute, because it makes the smoker generally of irascible and hot temper, and because it is used by the lowest classes of people.

I am told it is customary with the low class people of East Bengal to worship hemp plant on the occasion of the Trinetro melâ.

34. It would be a serious privation to all classes of consumers to forego the smoking of ganja. The ascetics and mendicants, who always remain exposed to sun and dew, and low classes of people who are obliged to work in rain, sun and dew, will feel the most. Many will have recourse to more deleterious drugs. About seven-eighths of the total number of consumers of all classes will feel the privation.

35. I think it would not be feasible to prohibit the use of ganja and bhang entirely. The drugs would be consumed illicitly. It could be enforced by enactment and entertainment of a number of excise officers. But the cost of Government would be large, and the harrassment and oppression on the people by excise and police officers great. It would occasion serious discontent among the consumers. I do not think that such discontent will amount to a political danger. The people of Bengal are very loyal and submissive, and they are always law-abiding.

36. I do not think that alcohol is now being in any way substituted for ganja or bhang.

37. I have no idea of the effects of charas and ganja smoking, so I am not in a position to state the difference.

38. The round sort of ganja contains more resin and it is possible to give greater intoxication to its consumers.

39. The smoking of any preparation of the hemp plant is a less injurious form of consumption than drinking or eating. I think the eating of ganja produces flatulency, and causes purging at last. I saw a man eat ganja, and he felt the above effects. Smoking of ganja gives instantaneous intoxication, whereas eating gives intoxication, I believe, after six hours. The said man got giddiness after six hours.

40. Bhang is used on account of its medicinal qualities by native doctors.

Both bhang and ganja are used in the treatment of cattle diseases. I myself used ganja as an ingredient in preparing certain medicine for my pony.

41. The moderate use of ganja may be beneficial in its effects—

(a) As a food accessory or digestive;

(b) to giving staying-power under severe exertion or exposure, or to alleviate fatigue;

(c) as a febrifuge or preventive of disease in malarious and unhealthy tracts;

(d) as a means of bringing in concentration of mind.

The few of upper and middle men who use ganja, use it as a food accessory or digestive. The ascetics and day labourers use it to have staying-power under severe exertion or exposure. Persons suffering from malarious fever use ganja or its extract as a febrifuge. These are moderate occasional smokers, while the above are moderate habitual consumers.

42. The moderate use of ganja in the above cases is beneficial and at the same time harmless.

43. The moderate ganja consumers are inoffensive to their neighbours.

44. The immediate effect of the moderate use of ganja on the habitual consumer is cheerfulness of mind. It is refreshing. It produces slight intoxication. It does not allay hunger. It creates appetite. The effect lasts for about six hours. The consumer feels his body light and dry. The want of subsequent gratification does not produce any longing or uneasiness.

45. (a) The habitual moderate use of ganja does not produce any noxious effects, physical, mental or moral.

(b), (c), (d) No.

(f) It does not deaden the intellect or produce insanity. I am of opinion that persons suffering from mental anxiety obtain relief in smoking ganja; but whether persons suffering from brain disease get relief or not by smoking ganja I do not know. I do not know of any instance of a person who is deficient in self-control through weakened intellect having ever become insane by indulgence in the use of ganja.

46. The habitual excessive use of ganja produces effects contrary to those stated in the preceding replies.

47 and 48. The habitual moderate use of ganja does not appear to be a hereditary habit. It does not affect the children of the moderate consumer.

49. The moderate use of ganja is practised as an aphrodisiac. It is so used by some prostitutes. I think its use for this purpose is not more injurious than its use as an ordinary narcotic. The use of hemp (ganja) does not tend to produce impotence.

50. The excessive use of ganja produces effects contrary to the above.

51. Among the habitual moderate consumers of ganja, I think the proportion of bad characters is not large. It does not appear to me that the moderate use of ganja has any connection with crime in general or with crime of any special character.

52. I do not know that the excessive use of ganja did ever lead any smoker to commit crime of the above nature.

53. I think not. I do not know.

54. I have seen latials smoke ganja, perhaps to fortify themselves to fight in an open affray (*danga*).

55. I am not aware of any such case. I think complete stupefaction cannot be possibly induced by smoking ganja without admixture.

56. The effect of ganja is modified by the admixture of ingredients, *viz.*, the admixture of dhatura and other narcotics heighten the power of the drug, whereas rose-water, etc., diminish the power.

I have no knowledge of the admixture of dhatura for personal consumption or for administration to others.

57. I do not know anything about the effects of eating and drinking ganja. I saw a man eat ganja and get flatulency and purging after seven or eight hours.

58. I am acquainted with the present system of excise administration in respect of the ganja produced in Naogaon. I consider it is working well, but it is capable of improvement.

59. The following are my suggestions for improvements:—

(1) That the wholesale vend of ganja may be taken in hand by Government like opium, if the results of the experiments of Dr. Prain as regards making ganja cakes prove successful. It will bring smuggling to the lowest ebb possible.

(2) That the limit of possession of 20 tolas of ganja under section 15, Act VII (B. C.) of 1878, may be reduced to 5 tolas as regards the ganja mahal. The reduction will cause no hardship on the consumers. It will suppress consumption of unduty-paid ganja, and increase Government revenue.

(3) That the Assistant Supervisors may be empowered to make searches without police assistance. The police stations at Mahadevpur in Dinajpur and Adamdighee and Nawabganj in Bogra lie to a distance of about 20, 10 and 10 miles, respectively, from the centre of the ganja mahal. It is not easy to get timely assistance, and the work of detection often suffers.

(4) That persons possessing any quantity of unduty-paid ganja should be punished. This being the ganja-producing tract, blades of ganja lie scattered in *chatars* and thereabout during the manufacturing season. People pick up such bits, consume, as well as sell. The consumption of such ganja causes loss to Government revenue as well as to licensed shopkeepers.

(5) That the Sub-divisional Officer of Naogaon may be vested with the power of trying excise cases detected by the Assistant Supervisors in the Dinajpur and Bogra portions of the ganja mahal. On detection of excise cases by the Assistant Supervisors in the Dinajpur and Bogra parts of the ganja mahal, the Assistants are now required to take with them the accused for trial to those districts, the head-quarters of which are about seventy-eight and twenty-nine miles from Naogaon respectively. On each occasion they are to remain absent from the ganja mahal for about four days, and the work suffers during their absence. The change of the criminal jurisdiction will save the Assistant Supervisors from the trouble of going to Dinajpur and Bogra, and enable them to utilize their valuable time in supervision work. It will also save Government from paying them travelling expenses.

60. The cultivation and manufacture of ganja are sufficiently controlled.

61. Charas is not produced in the ganja mahal.

62. I think the cultivation of the hemp plant for the production of bhang should in no way be controlled. It would be feasible, but it would not be necessary.

63. I have no objection to the present system of ^{wholesale} vend of ganja.
retail

64. No.

65. The taxation of ganja, charas, and bhang is reasonable with reference to each other.

66. In my opinion it is necessary that there should be different rates of taxation between the

ganja (flat, round and chur produced in Naogaon), and that grown in other localities, such as Gurjat in the Tributary Mahals, in Orissa, according to their narcotic strength and the wood they contain.

The present rates of duty on the Naogaon round and chur ganja are disproportionate. They might be raised to Rs 8 and Rs 10 respectively.

67. I have no objection to the present method of taxing ganja.

68. There are some licensed ganja shops in the ganja mahal for the vend of ganja. The quantity of ganja sold is partly smoked in the

shop and partly consumed elsewhere. I have no objection to persons smoking ganja in the shop.

69. In opening a ganja shop in any place, the wishes of the people are not consulted or considered. I think it is not necessary to consult or consider local public opinion, as the shop is not a nuisance.

70. I have no knowledge as regards the importation or smuggling of hemp drugs from Native States into Bengal. Petty ganja smuggling goes on in the ganja tract, and it cannot be suppressed. Duty is paid in respect to the ganja used. There is no general use of untaxed ganja.

85. Evidence of MR. E. R. HENRY, Inspector General of Police, Bengal.

I have the honour to state that I forwarded copies of questions 51 to 55 set by the Indian Hemp Drugs Commission to all the District Superintendents in the Lower Provinces for report. I have now received their replies, and forward summaries of the information collected.

51. The general opinion is that no large proportion of bad characters are habitual moderate consumers of these drugs, and that the moderate use has no connection with crime in general or with crime of any special character. Bad characters are said to use these drugs in Howrah, Puri, Dinajpur, Tippera, Bankura and Pabna, but there is nothing to show that they do so to a greater extent than the ordinary population of the lower classes. In some places petty thefts are reported to have been committed in order to obtain the means of purchasing the drug. Beyond this form of crime no others can in any way be directly connected with the moderate use of the drugs.

52. The consensus of opinion is that the excessive use of these drugs has but little connection with crime. There is considerable divergence of opinion regarding the excessive use of these drugs. Some few consider that the excessive use of the drugs has an enervating effect, producing incapacity, while a larger number report that it has been known to induce madness, excitability, assaults on females, suicide and murder.

53. As regards this question, opinion is also divided. Some District Superintendents are inclined to believe that the excessive use of hemp drugs does lead to the commission of unpremeditated crime, while, on the other hand, several officers hold the contrary opinion. There seems, however, little doubt but that the excessive use of ganja makes a man irritable; and there are cases on record in which murders and murderous assaults have been committed under its influence.

54. It does not appear that hemp drugs are generally used by criminals to fortify themselves to commit premeditated crimes. Several officers, however, report that they are used by lallials (club-men) and dacoits (gang robbers) to stimulate their courage when setting out on fatiguing and hazardous expeditions.

55. The general opinion is that the drugs are not used to stupefy victims preparatory to the commission of crime. There do not appear to be any instances in which these drugs have been used alone to produce stupor, and in the few cases in which its use is reported, it has been mixed with dbatura, when stupefaction is produced. Possibly the drug administered to excess will cause com-

plete stupefaction, but it seems doubtful whether insensibility, such as is necessary for criminal purposes, can be caused by hemp drugs alone to intended victims without detection.

Oral evidence.

I joined the Bengal Civil Service in 1873. Practically all my service has been in Bengal. I have been three years Inspector-General of Police in that province.

Question 51.—I am having a kind of Criminal Biography compiled confidentially for the bad characters of the province. It is done for several thousands. I have here the figures for 1,408 bad characters. I have not selected them, but have taken all the figures for Gaya town and four other districts. These biographies were compiled quite apart from any inquiries for this Commission. Of the 1,408, I find it on record that 601 (of whom 334 are of Monghyr and 133 of Gaya) are addicted to the use of liquor, 199 (of whom 71 are in Rajshahi) are addicted to the use of ganja, 16 are said to take bhang, none are shown to take charas, 49 take opium in various forms, and 38 are stated to take both ganja and other stimulants. The four districts are Cuttack, Monghyr, Rajshahi and Howrah. I took these districts for these reasons. In Orissa opium is mostly used, so I took Cuttack. Rajshahi is a ganja-producing district. Howrah has a large population of mill-hands, operatives and artizans. Monghyr is a typical Behar district, where there are a large number of men believed to lead an actively criminal life. Gaya is a great pilgrim resort.

I have no information about the balance, 505. The figures I have given simply show the cases in which entries as to intoxicants were made in the biographies. These, as I have said, were not compiled in connection with any inquiry as to intoxicants. In my belief these districts are representative. The divisions represented are Orissa, Patna, Rajshahi, Bhagalpur and Burdwan.

It is a matter of some importance to know whether a bad character uses intoxicants, and most police officers would note whether a man took ganja or liquor. He would not be likely to note the bhang habit unless it were to excess. But this note would depend on the personal equation of the officer, for there are no definite orders on the point. The police officer has simply to write out the best description he can of the bad character. The great majority of the cases in which these bad characters are involved will be

theft and burglary. The bad characters are exclusively connected with offences against property.

There is no note as to whether the consumption of these drugs or intoxicants is to excess or in moderation. In inquiries which police make, and in the reports they submit, they never discriminate between excessive and moderate use. Not in any reports I have seen. Their attention has never been drawn to this by rule. All I see in such reports is merely a statement that a man is addicted to the drug. From this I cannot judge whether he is a habitual moderate consumer or a dissolute wreck from the drug.

In general, I am unable to connect professional crime (theft, burglary, dacoity) with hemp drugs in any way. I wrote on this subject to Mr. Harris, District Superintendent of Police of Gaya, an officer of twenty-eight years' service, whom I regard as having special powers of observation and special knowledge of the language and habits of the people. He says: "One hears of a *madaki chor*, but never of a *ganja chor*. I cannot call to mind any case of any kind in which it was alleged that the offence had been committed in consequence of the use of ganja, bhang or charas." I concur in this in respect to the general statement, that there is no established connection in the way of cause and effect between hemp drugs and professional crime.

Question 53.—The cases to which I refer here are cases mentioned by District Superintendents of Police in reporting to me on this subject in connection with my inquiries on behalf of the Commission. I have not looked into the cases myself, and cannot say how far they are really cases of violent crime due to hemp drugs. I have not myself in the course of my duty had to inquire into, and come to a conclusion on, this question. Murders are not regarded as part of professional crime, and therefore the special reports are not sent to me. They go to the Commissioners of Divisions. I receive only special reports of professional or preventible crime. From a police point of view, murder is not a preventible offence. Therefore reports in these cases do not come to

me. I merely deal with the statistics of such crime, and report on them at the end of the year.

Question 45.—Breaches of discipline involving any degree of punishment (including dismissal) are dealt with in case of constables by the District Superintendent of Police with appeal to the District Magistrate and finally to the Commissioner. I have only to deal with cases which have so terminated as to seem to require reference to the Local Government for revision. This is very rare. This procedure, as far as I am concerned, is the same for all officers below the grade of inspectors. I only deal myself with the case of inspectors of fourth and third grades, and in the case of inspectors of first and second grades I make recommendations, which I have to forward to the Local Government. I do not see the monthly Force Returns of punishments. They go to the Deputy Inspectors-General. The annual statistics which I receive do not show detailed cause of punishment. I only look into the punishment figures when inspecting districts: there I go through selected proceedings, and in these cases only do I acquire knowledge of details. If I found that any old member of the force had been dismissed, I should go into his case, but not into the case of a man who had only short service unless he petitioned. As far as my own experience goes, I have never had a case brought before me in which hemp drugs have been mentioned in connection with the offence or breach of discipline for which the constable or police officer was punished. Neither of my Deputy Inspectors-General has brought to my notice that there is evidence of hemp drugs having any tendency to sap the discipline of the force. Between us we inspect every district of the province and a considerable number of sub-divisions every year.

The district executive force consists of 17,619 constables, 1,272 town chaukidars, 2,346 head constables, 901 sub-inspectors, and 151 inspectors. This is the sanctioned strength. The vast majority are natives. A few inspectors and sub-inspectors are Europeans and Eurasians. A certain proportion of the lowest grades are from the North-Western Provinces and the Punjab—nothing like half the force.

Statement put in by Mr. Henry.

Statement showing rank and castes of members of the Bengal Police Force (a) dismissed, (b) punished other than by dismissal, for incapacity or defect brought about by the use of intoxicants during 1893.

RANK.					CASTE.					PUNISHED OTHERWISE THAN BY DISMISSAL FOR INCAPACITY OR OTHER DEFECTS ARISING FROM USE OF				DISMISSED FOR INCAPACITY OR OTHER DEFECTS ARISING FROM USE OF			
Inspector.	Sub-Inspector.	Head Constable.	Constable.	Chonkidar.	Sudra.	Musalman.	Gurkha.	Bhutia.	Brahmin.	Bhang.	Ganja.	Alcohol.	Opium.	Bhang.	Ganja.	Alcohol.	Opium.
...	2	2	16	...	8	6	2	1	3	...	■	11	...	...	1	5	...

86. Evidence of MR. W. D. PRATT, District Superintendent of Police, Bhagalpur.

3. Bhagalpur. It is very abundant in the Supaul and Madhipura Sub-Divisions.

4. I only know it by the term bhang.

5. It likes a light soil.

6. Dense and scattered. I have seen it eight feet high. It is a difficult jungle to eradicate.

7. I never heard of any cultivation of the wild bhang. There is no occasion for any; it is so plentiful.

8, 9 and 10. No cultivation to my knowledge in Bhagalpur.

11. I never heard of this.

12. No reason to suppose this.

15. In Bhagalpur I know that a slightly intoxicating drink is made from steeping the leaves in water, and I know that some preparation of the resinous substance is used in sweetmeats by the better class of Hindus.

16. I never heard of any one using the wild bhang for smoking.

23. No, not to my knowledge.

24. They drink it in Bhagalpur. See my answer 3.

25. I should say *not*.

29. No, I do not know bhang massala.

42. From what I heard at Bhagalpur I was led to the belief that the preparations of bhang for drinking and for the sweetmeat majum are quite harmless and very mildly intoxicating.

43. No.

51. I should say it does not influence crime one way or the other. I mean concerted crime.

53. Excessive use of ganja may incite to unpremeditated crime.

87. Evidence of MR. W. C. FASSON, District Superintendent of Police, Bogra.

1. As District Superintendent of Police of Bogra, in parts of which ganja is cultivated, in which also the wild bhang grows; by enquiries from Police officers and Babu Kasi Chunder Guho, Officiating Inspector, who has long experience of Bogra District; and by enquiry from cultivators.

2. Flat ganja is called "chepti"; round ganja is called "gol". The formation of seeds is not entirely prevented. Seeds may be seen in the manufactured article, and cultivators say they get a sufficient quantity each year for the next year's sowings. Round ganja, after being rolled under foot, is squeezed by hand; and it is not dried so long as flat ganja. Yes, the definitions may be accepted, but charas does not appear to be produced, or rather preserved, separately; and chur, locally, is only accidentally produced by breakage.

3. In the south of Dinajpur District ganja is cultivated (*e.g.*, Mahadebpur Thana) and in the Nawabganj and Adamdighi thanas of Bogra district. The wild hemp grows generally in sandy soils in these districts.

4. Bhang, sidhi and patti appears to be the names used. I gather that the wild plant so called is the same as that which is cultivated, but is different in appearance, because, probably, of the extirpation of male plants among the latter.

5. A sandy soil is necessary, and excessive rainfall is injurious. Both wild and cultivated plants appear to require these conditions, for the former is not to be found in clay or sticky soils.

6. I am informed that it is dense.

7. In this district it is cultivated for the production of ganja only. The wild hemp is used for bhang.

8. I have no information.

9. The land used for ganja must be repeatedly ploughed between Falgun and Bhadra months; it must be sandy; it is only used once in four years for ganja, *sursa* being the only advantageous alternate crop; and it is manured with cow-dung and the refuge "*sursa*" plant in Choitra and in Bhadra. The above refers to the land on which the plants are raised from seed. Sowing takes place in Bhadra, and in Assin. When the plant is about six weeks old, it is transplanted into land that has been well ploughed, but not manured. Manure is scattered over this ground after the transplanting is effected. Flowers appear about the month of Paus, and, in* Magh, the "poddars" visit the lands to pick out "bhang from ganja,"

* Some villagers said that the poddars could do their work in Kartik.

as the villagers put it. Any wild hemp found growing near the land is at once exterminated.

10. They are not a separate class.

11. The villagers say that they collect the seeds which fall in the process of manufacture, for the next year's sowing.

12. I have no such information.

13. In this district. It is restricted to the thanas of Adamdighi and Nawabganj. Other parts of the district would be suitable, but are more distant from Naogaon.

14. Ganja and bhang are used and prepared in Bogra, but ganja only from the cultivated plant.

15. The methods of preparation in use are (1) for flat ganja; (2) for round ganja; and (3) for bhang or sidhi.

(1) The cultivated ganja, having flowered, is cut down close to the ground (*i. e.*) stalks, leaves and flowers are taken in Falgun. It is then arranged in circular heaps (each plant radiating from the centre of the circle, the flowers being near the circumference) upon a bamboo mat; and another mat being placed on the heap, weights are placed on it, or the members of the cultivator's household sit on it, so that the heap of plants is subjected to considerable pressure for one day. (The above process is adopted after one day of sun drying). The heap is rearranged, each plant being turned upside down, and is again pressed (on the third day) between the two mats. The resin is washed off the mats, and then the plants are arranged in long shallow heaps (on a series of mats), and over these the cultivator, his family, and any friends he can impress into his service, walk up and down, treading the plant into the flat condition which makes it "chepti" or flat ganja.

(2) Round ganja is only dried for half-a-day, is not pressed between mats, and, instead of being trodden on and flattened, is rolled under foot and then compressed in the hands. In both cases the leaves remain on the stalks till the process is complete, and are

then picked off as valueless. In the flat ganja long stalks are allowed to remain, but in the round ganja they are cut off just below the flowers.

Both these preparations are said to be used for smoking only in this district. No use is made of the resin which exudes during process of manufacture.

(3) Bhang or siddhi is made by boiling the leaves of the wild hemp with milk.

16. Bhang is generally prepared for home consumption wherever the plant grows wild. It is not reported that bhang, siddhi or patti (as the wild plant is indifferently called) is used for manufacture of ganja.

17. The use of ganja is characteristic of individuals rather than classes, but it is extensively used by cultivators, and almost invariably by bairagis, fakirs, sanyasis, and other religious mendicants.

18. They are reported to degenerate and lose their effect, by exposure, in time. Dryness appears to be an essential condition of preservation.

19. Ganja is used only for smoking and medicinal purposes.

20. The proportion of people who smoke ganja in Bogra is large, but impossible to estimate. It is said the consumption is greatest in the neighbourhood of ganja tracts, but I do not know that this is a safe assertion.

21. Flat and round ganja are both used, but flat, being cheaper, is probably most used.

22. None, it is said.

23. No; it is said that it is used only for drinking.

24. It is said that is not eaten. It is drunk in most parts of the district, but not, it is said, habitually. The fact is that people do not care to admit its use, but I am told that nearly all prostitutes and their clients drink it.

25 to 27. I have no information.

28. The average allowance is estimated by the Inspector of Police at half a tola or 2 annas' worth for moderate consumers, and one tola or 4 annas for excessive consumers.

29. (a) Tobacco is mixed with ganja, as it makes it burn slowly. Milk, pepper, dhanias, salt and water, and sugar are used with bhang.

(b) Dhatura seed is mixed with ganja to improve the flavour and render it more intoxicating, and is also supposed to strengthen the powers of digestion.

30. It is estimated that three-fourths of the consumers take it in company, and one-fourth in solitude. It is chiefly used by males, but nearly all prostitutes use it. Children do not.

31. The habit is not said to be easily formed; but once established, it is difficult to break off, and moderation generally leads to excess.

32. I am told that there are such religious customs, etc., but I have not learnt anything specific in this connection.

33. The ganja smoker is generally looked on with contempt; and among the more respectable classes, public opinion (social) condemns the habit; but this does not affect the uneducated labouring classes, to whom it is in a sense a necessity. A knowledge of the general development of results is a sufficient reason for disapproval of ganja-smoking. It is almost invariably

adduced by village people (as also by Police officers) as a reason for believing any suspected character capable of any kind of crime; but this is because it leads first to sexual incontinence, and then to excessive expenditure, which becomes imperative to supply an irresistible and increasing craving for the drug. No worship is spoken of.

34. Religious mendicants, whose long journeys and constant exposure render the drug a necessity, and the class of agricultural labourers who have become dependent on it by constant use, would find its loss a serious deprivation. These are estimated as about one-quarter of the population.

35. Prohibition would in all probability lead to illicit cultivation and to the use of other drugs or stimulants. It could only be actually enforced by extermination of the plants, both cultivated and wild. It is unlikely that political disturbance would follow, as no powerful class would care to identify itself with the consumers.

36. I have no information to this effect.

37. Charas is not used in Bogra.

38. The difference is in degree only, as far as I can learn.

39. Drinking bhang is supposed to be the least injurious method of consumption, which is probably due to the admixture of milk and to the slight intoxicating effects.

40. It is prescribed by Kabirajes and also in cattle disease.

41. The use of ganja is said to be beneficial: (a) in moderate use as a digestive; (b) in habitual use to support severe fatigue or exposure; (c) and in both cases as a febrifuge and preventive of gout; (d) it is also said to produce a fleeting kind of courage when occasionally used.

It is not said that constant increase of the daily amount is required for these results.

42. It appears to be harmless in all cases when the consumption is moderate and when the effects are worked off by legitimate labour, etc.

43. Yes, it is said so.

44. To the habitual consumer the effect is stimulating, pleasant, and refreshing. It creates appetite, and the effects are said to last about two hours. There are no after-effects at the time. Moderate consumption need not produce intoxication, and the habitual consumer will be uneasy and lose health if he cannot obtain his usual supply.

45. It is said to produce sexual excitement. In moderate use it is not said to produce any of the bad effects named, but it is admitted that, unless nourishing food is also taken (and especially milk), that ill-health does follow, and also, that death from dysentery is very commonly the ultimate fate of ganja-smokers. Laziness follows deprivation with habitual smokers.

46. The excessive use of ganja is almost always accompanied by sexual excess. If sufficient and good food is not taken, dysentery, asthma, bronchitis ensue. Insanity is generally temporary when induced by ganja smoking, and generally takes the form of imbecility; but there are hopeless cases, and I can quote at present the cases of Hura Chaukidar of Dupchanchia in this district, in whom unusual robustness for his age is accompanied by imbecility.

This year a sad case of violent insanity induced by ganja smoking came under notice, in which the

madman, Thakur Dass, killed his own child and attempted to commit suicide.

There was no evidence in either case of insanity prior to the use of the drug, but the ganja smokers, who have come under my notice, have generally been men of a low type of intellect. Habitual smokers sent to jail generally admit the habit.

47. No. It is not supposed to be hereditary or to affect the children in any way.

48. No. It is said to be the result of association with others, and not to communicate itself to children.

49. Nearly all prostitutes keep either ganja or siddhi, both for their own consumption and for their visitors. It is not said to produce impotence.

50. Impotence is not reported as an effect of the drug at all, though sexual excitement is one of its first and prominent effects.

51. Yes; a large proportion. But this is attributed, first, to debauchery and evil companionship resulting from the use of the drug; and, second, to the additional expenditure incurred in obtaining the nourishing food which is a necessity to a ganja smoker, and which impells him to theft, etc.

52. The same answer applies *à fortiori* to the excessive use of the drug; but ganja smoking as a direct cause of crime is not very commonly heard of in these districts.

53. I have mentioned the only case that I remember in my reply to question 45.

54. There is no specific information on this point, but it is supposed to be a fact in the case of dacoits and gang-robbers.

55. I do not know of any instance.

56. I have noted above the fact that dhatura is so mixed with ganja, and that it increases the intoxicating and other effects; but I have no specific information on this head.

57. This does not apply to Bogra, where it is said that charas is not used, and ganja is only smoked.

58. I am imperfectly acquainted with the system.

59. Thefts of ganja are common. Bairagis seem to be the principal offenders.

60. Charas is not produced.

61. Bhang is in this district made from the wild plant, and is said to be practically harmless, and its extermination would be more trouble than it is worth.

88. Evidence of MR. F. H. TUCKER, District Superintendent of Police, Dinajpur.

1. I have had to consult some native officers on various questions, and the views noted are general.

2. Yes, but siddhi, bhang, subji or patti are different names applied to the dry leaves of the male hemp plant. Each of these products are locally known by the name of bhang, charas and ganja. There are three varieties of ganja, flat, round and chur.

3. Male hemp plants grow spontaneously in the district of Purnea, as well as in this and many other districts in Bengal.

4. Bhang. Yes.

5. Humidity and sandy nature of the soil and copious rain.

6. Dense.

7. Yes, to a small extent (a) for the production of ganja, in thana Mahadebpur bordering on the district of Rajshahi, where it is cultivated under Government supervision.

8. Normal.

9. Nil.

10. Of the same classes as other agricultural cultivators.

11 and 12. No.

13. Yes, it is cultivated under Government supervision in the districts of Rajshahi, Bogra, and Dinajpur in limited localities, where soil is good and suitable.

14. Yes, in the district of Rajshahi, Bogra, and Dinajpur(a).

15. I am unable to do so.

16. (a) No, for restrictions imposed upon it.

(b) Yes, can be prepared.

(c) Yes.

17. No particular class. The ordinary cultivating (ghrist) people do it.

18. Yes, it does lose its effects if kept over a year. It can be kept in tolerably good condition for a year or so with ordinary care. The resinous matter becomes dried up owing to atmospheric influences. Deterioration can to a certain extent be prevented by storing the articles in tin-lined boxes.

19. Yes, only for smoking, except in the case of majun, which is sold in the town of Dacca and Calcutta; majun is another preparation from ganja left out by Dr. Prain. The following is the mode of preparation of this article:—

The juice of ganja is extracted by boiling, and a quantity of milk and sugar is then mixed with it. The whole admixture is then boiled; the sticky substance so prepared is formed into cakes, like the native *sweet barkh*, and eaten as such, producing intoxication, but not so strong as ganja smoked in chillum.

20. In Lower Bengal, especially in flooded districts, the lower classes of people, such as fishermen and boatmen, and who are constantly exposed to rain and water, take to ganja. Not more than one per cent. of the people smoke ganja.

In Behar ganja is smoked by the Brahmins and Rajputs, who object to taking liquor. Charas is used by a very small number of the people, who are obstinately intemperate, taking pleasure in all sorts of drugs and drinks.

21. Flat ganja is mostly in requisition in East Bengal and Behar; whilst round ganja is being largely consumed in Western and Southern Bengal.

22. Foreign. From Nepal.

23. No.

24. Bhang is drunk everywhere I know of.

25. The use of ganja is on the increase, especially in those districts where the outstill system (cheap liquor) is not in vogue, and where people are comparatively poor and cannot pay the high prices of liquor.

26. (a) .5
(b) .1
(c) .8
(d) .1 } Ganja and bhang.

27. Ganja is indulged by the lower classes of the people and bhang by the middle classes of the gentry, especially during the time of festivals, such as Bijaya and Sivaratri.

Fishermen and boatmen, etc., who are generally exposed to the inclemency of the weather, take to ganja.

Charas and majun are taken by those shamelessly intemperate persons of the middle class, whose pleasure it is to amuse themselves with all sorts of drugs and drinks.

28. (a) 3 pies per diem.

(b) 1 anna per diem.

29. Nothing is mixed with ganja or charas. Milk and sugar is exceptionally mixed with bhang to make it more intoxicant. I don't know anything of bhang massala.

30. Ganja and charas are smoked in company, whilst bhang is drunk in solitude. Mainly confined to the male sex. Bhang is mostly drunk at declining age when men become susceptible to attacks of diarrhoea. It is not usual for children to consume any of these drugs.

31. Habit not easily formed. It is difficult to break off. Not very much.

32. There is no such religious custom. But there is a social custom observed by a very few men of the lower classes of people to smoke ganja during Chait Sankranti festivals, and bhang is drunk by some of the middle class of men of West Bengal during Bijaya Dasami, which practice is not at all observed by the people of East Bengal. It is not at all regarded essential to use the drugs on the vain plea of such festivals. Generally temperate. It does not lead to the formation of the habit, or otherwise very injurious, owing to its rare use.

33. The consumption of any of these drugs is regarded with abhorrence. Yes, there is a strong public opinion (social) against the use of the drugs. There is a saying throughout the country—"That man is a ganjakhor" (a "ganja smoker"), marking him as possessed of all sorts of waywardness and peevishness.

No custom of worshipping the hemp plant.

34. Yes; the fishermen and boatmen, etc., who are exposed to the inclemency of the weather, feel themselves much relieved of their labour and exposure by a chillum of ganja, which is supposed to bring back their energy and drooping spirits.

35. It may be feasible to prohibit the use of charas and majun, and the use of bhang to a certain extent, but that of ganja doubtful. Yes, ganja and bhang to a certain extent would be consumed illicitly. Prohibition can be enforced by strong legislative measures, with the inevitable result of serious discontent among the consumers. Never amount to any political danger. In all probability the prohibition will be followed by recourse to (a) alcoholic stimulants.

36. The occasional smokers may take to cheap liquor; but it would never be the case with habitual smokers, who indulge in it as a matter of

necessity and not as a matter of pleasure as with the others.

37. The narcotic effects of charas smoking are not so instantaneous as those of ganja, which make the smokers peevish and headstrong. The effects of bhang are slow and mild, never making the consumers violent, but rather jolly and witty.

38. Not to my knowledge.

39. Nil.

40. Bhang is prescribed to arrest the progress of diarrhoea. It is also used in the treatment of cattle diseases.

41. (a) Moderate use of bhang helps digestion.

(b) Ganja gives staying-power and alleviates fatigue.

(c) Nil.

(d) Nil.

Middle class men of declining years, who ail from indigestion, use bhang habitually, their proportion being one in a thousand. Lower classes of people, such as fishermen, boatmen, palanquin-bearers and others, who are constantly exposed to weather, smoke ganja to give staying-power or to alleviate fatigue, their proportion being .25.

Moderate habitual use is only referred to.

42. Moderate use of bhang is harmless, if not wholly beneficial. Bhang relieves a sufferer from a malady without causing proportionate harm as an intoxicant; whilst ganja stimulates a poor labourer to earn a better livelihood by overcoming fatigue and sustaining staying-power.

43. Yes.

44. Stimulating and refreshing. Does not produce intoxication. No, rather increases the appetite. Effects last for an hour or so. No after-effects. These drugs are indulged in at fixed hours, producing longing or uneasiness if not gratified at those hours.

45. (a) No.

(b) No.

(c) No, rather increases it.

(d) Bhang stops dysentery. But ganja, if much indulged in, causes dysentery, bronchitis or asthma.

(e) Yes. No. No. Ganja makes a man rather more active.

(f) It certainly possesses the effect of deadening intellect and causing a nature of insanity in some. Some such cases can be brought round if taken in time by preventing the use of the drug. Some are hopeless. There is evidence that insanity may often tend to indulgence in the use of hemp drugs by a person deficient in self-control through weakened intellect.

I know of two cases of sepoy who suddenly showed signs of inaction and wandering propensity, and a great desire for sleep and solitude and want of appetite. One turned out incurable, and the other man recovered when taken in time, and the reasons became known that he was addicted to ganja and charas smoking.

46. See above.

47 and 48. No. Not so as of liquor.

49. (a) Yes.

(b) No.

(c) I am unable to say.

50. None to discuss.

51. (a) No.

(b) Nil.

52. Yes, ganja makes a man irritable and headstrong, and leads the excessive smoker to any sort of rash doing.

53. Yes, excessive indulgence in ganja incites a man to unpremeditated crime, the effects of rashness and violence of temper caused by smoking it.

54. No. This might be said of liquor.

55. (a) No. (b) No.

56. Nil.

57. Unheard of.

58. Working well, but requires the supervising staff to be a little more strengthened.

59 and 60. Ganja is cultivated only in the district of Rajshahi, chiefly in the Naogaon subdivision.

The chief local administration of the ganja mahal now rests in the hands of the Subdivisional Officer of Naogaon in addition to his other duties.

There should be a Special Excise Deputy Collector for the ganja mahal, who will be able to devote his undivided attention to the management of the ganja mahal.

The supervising agency is very weak, having only a supervisor of the rank of a Sub-Deputy Collector, with one assistant of the rank of a Kanungo. They cannot properly keep up strict supervision over the cultivators, etc., owing to the extensive field of the work and the multifarious nature of the duties they have to attend. They are, therefore, compelled to entrust some of their subordinates with many responsible duties, such as weighment of ganja during storage and exportation. This is quite objectionable, and subordinates being not above temptation, the weighment of ganja when taken, during storage, at the gola in the importing districts, is invariably found to disagree considerably with the quantity noted on the pass from the exporting district, giving every allowance for dryage on transit. There must necessarily be something rotten at the bottom. To obviate this, some responsible officers must actually remain present during weighment, whether for storage or for exportation. So the staff of the supervising responsible officers must be strengthened—at least doubled.

61. The luxury of indulging in charas must totally be abolished, as being quite unnecessary.

62. Bhang is never seriously considered by the people to be an intoxicant, and its effects are not injurious to any appreciable degree. It is invariably used in medicinal purposes, but seldom with the object of intoxication, so no sort of restrictions ought to be imposed upon its free use.

63. Preparation and sale of charas ought to be stopped altogether.

Bhang ought to be allowed to be used freely.

Wholesale vend of ganja.—The wholesale vendors do not pay anything either in the shape of fee or duty. License for a wholesale gola ought to be granted, on condition of payment by the goladar, of a certain duty, say one anna per seer of ganja imported to the gola. Now the duty on ganja is paid only by the retail vendors and not shared by the wholesale vendors. The maximum quantity of ganja which a retail vendor can now sell to the consumer at a time is 4 chhattacks. This should be restricted and the maximum reduced to one chhattack at a time.

64. The exportation of ganja in bags ought to be stopped, and tin-lined boxes, well secured, should be enforced instead. To extract ganja from the bags during transit, keeping the seals intact, is not a difficult affair, and straw of equal weight may easily be inserted into them. That some of the goladars or their agents thus defraud Government out of its legitimate dues in the shape of duty, there is every reason to suspect. This sort of suspected malpractices during transit might be one of the reasons which accounts for the considerable loss in weight of the actual quantity of ganja during storage at the gola of the importing districts, though it is curious to observe that the gross weight (bag, ganja and straw) generally tally with the gross weight noted on the pass from the exporting district.

65 (a). Preparation and sale of charas ought to be stopped, and taxation on bhang ought to be abolished.

(b) Although the duty on ganja has been increased by a rupee on each seer from April last, the duty on it is yet capable of being further increased.

One pice worth of ganja makes one intoxicant, whereas 4 annas worth of alcohol will fail to produce equal effects.

66. Yes, there are at present different rates of duty for different kinds of ganja. But the practical value is the same. The present taxation is gradual in proportion to the quantity of stalks found in each sort.

68. Yes, there are licensed shops. Consumption is not allowed on the premises where they are prepared, but is allowed in the retail vend shops, which ought to be discouraged.

69. Not generally. Public opinion ought to be considered.

70. Cases of smuggling of hemp drugs from Nepal into the Bengal frontier districts are rare. The quality of the Nepal drug is much worse. Sometimes dealers in ganja in Nepal come to the frontier districts and take out ganja on payment of proper duty. There is no general use of untaxed drugs, as is suspected to be the case with liquor.

89. Evidence of MR. R. L. WARD, District Superintendent of Police, Rajshahi.

1. I have served in the Police Department for fourteen years. In the districts of Patna, Gaya, Bankura, Backergunge, Chittagong Hill Tracts, Palaman, Ranchi, Shahabad, Darjeeling, Dhubri (Assam), Pabna, Bogra, and on three occasions in Rajshahi, where I am now.

2. The definitions may be accepted.

Ganja locally known as bhang or siddhi. Charas is not made sold, or used in this district. It is true that ganja, bhang and charas are prepared

from hemp, but ganja I have always understood cannot be made from hemp growing spontaneously. From that bhang only is obtained. Round ganja is known and made here. Patti or subji is not known here.

3. I have found wild hemp in fairly large quantities in Hill Tippera and Chittagong at the foot of the hills, and in smaller quantities in Eastern, Northern, and Central Bengal, and usually on high lands.

4. The general name is bhang. I believe it to be exactly the same plant everywhere.

5. I can't say what conditions of climate, &c., are necessary to the growth of the wild hemp, but I found it growing in elevated lands abundantly. It appears to require sun, free ventilation and a well drained soil.

6. The growth of the wild hemp was found to be dense.

7. There is cultivation of the hemp plant in the Naogaon subdivision in the district of Rajshahi and in the adjoining districts of Bogra and Dinajpur, within an area of about 20 square miles :—

(a) For the production of ganja.

(b) No cultivation for production of charas.

(c) Rarely for use as bhang.

(d) For use as fibre, the plant would have to be destroyed before the leaves could be of use as ganja, and seeds only by local cultivators.

The seed is not parched, neither is oil extracted in this part of the country.

8. I am not in a position to say if there is at present any increase and decrease in the area under cultivation of ganja. It depends upon seasons and ruling prices.

9. In August and September seedlings are prepared like winter paddy crops, and then transplanted into well-manured and ploughed fields, which from time to time are irrigated.

10. Those who cultivate hemp for its narcotic properties are not a special class. They are the ordinary agriculturists of the locality.

11. I should say not.

12. I have no knowledge or reason to suppose that wild hemp is anywhere cultivated for the production of ganja, but I have often found a single plant which might be used for ganja-growing in the gardens of well-to-do men.

13. The cultivation of ganja is restricted to the Naogaon subdivision and some villages of Bogra and Dinajpur, under the control of the Superintendent of Ganja Cultivation, Rajshahi.

I am not in a position to say why the Naogaon subdivision has been selected. I should say that any part of the Bogra district would do as well; in fact, any well-drained area where a sufficient (but without an excessive) rainfall can be secured. I should have thought a cooler climate under above conditions would have been better. Naogaon is about the only dry place in this district.

14. (a) Ganja is prepared in Rajshahi.

(b) Charas is not prepared here. I believe it can be got almost anywhere in Behar, but I do not know who it is prepared by.

(c) Bhang, as a rule, is not manufactured anywhere, but the leaves of wild hemp are collected by those who like bhang, and prepared by them as required.

Ganja is prepared to the extent it is necessary for the consumption of Bengal, Behar, Orissa, and Assam. Bhang is prepared very rarely in Bengal, but in Behar to a greater extent.

15. I cannot answer this question. Cultivated ganja is prepared for smoking only.

16. Bhang is generally prepared by the people in their houses. Yes; it can be prepared from hemp plant wherever grown. I do not think ganja and charas can be prepared from the wild plant in any district.

17. There is no particular class of people by whom the preparations of the hemp drugs are respectively prepared.

18. Each of the three drugs deteriorate after the lapse of a couple of years. Damp, rats, etc., are the causes. The cultivator is too poor to invest in chests or iron golas.

19. Ganja and charas are only used for smoking. I have seen ganja and water drunk by servants out shooting, and by up-country fakirs and forest rangers.

20. Ganja is generally smoked by the lower classes of people of Eastern Bengal—that is, that part of Bengal which is for the greater part of the year under water and damp. It is, I think, a mistake to suppose that the Behar and the Rajput landlords do not also use ganja.

(a) Bairagis, sanyasis, and all religious mendicants.

(b) Fishermen.

(c) Boatmen.

(d) The labouring classes, earth-cutters.

(e) Muhammadan.

(f) Chandal, cultivators.

(g) Even men of the middle and higher classes smoke ganja in Eastern Bengal, the proportion being quite 20 or 25 per cent. of the whole population.

21. Flat ganja is generally consumed by the people in all districts except Calcutta. I cannot give any reason for this preference of flat ganja to other kinds. What is known as mohini ganja is prized, but it is scarce. It is very strong.

22. I have no knowledge about charas.

23. To my knowledge bhang is never used for smoking. It comes into use in some of the Hindu religious ceremonies.

24. The sanyasis and other religious mendicants generally make pills of bhang and eat them. Other people drink bhang. Fifty per cent. or more of the up-country people drink bhang, and about 20 per cent. of other places use it.

25. I do not think the use of ganja is on the increase. The use of bhang may be on the increase. Owing to high price of ganja, the people can hardly afford to pay for it, and in lieu of ganja many people, especially the sanyasis, bairagis and other mendicants, use bhang. In every large village there are ganja smokers, but on account of the high price of the intoxicating drugs, the number of such men is very small.

26. (a) About 75 per cent. of the ganja smokers are habitual moderate smokers.

(b) Habitual excessive smokers may be 10 per cent.

(c) Occasional moderate smokers may be 13 or 14 per cent.

(d) Occasional excessive smokers may be *nil*, or at most 1 to 2 per cent.

27. From all classes of people are these taken. The fishermen and the cultivators are led to the practice for preventing rheumatism from cold and damp, and so also those who lead the life of ascetics, who sleep in the street, under trees, and on banks of rivers, etc. The labouring class is habituated to ganja for the purpose of avoiding exhaustion from fatigue. Higher classes are usually first led to the habit by association with prostitutes, who nearly all use the drug in moderation.

28. The average cost of ganja per diem to

- (a) Habitual moderate consumers may be one anna at the least,
- (b) Habitual excessive consumers may be at the most 8 annas or a tola's weight= 4 annas.

The cost of bhang to either of those classes is nominal.

29. Tobacco is ordinarily mixed with ganja to adulterate it. I do not know if anything else is exceptionally mixed with this drug. I do not know also if dhatura is ever mixed with it. If it is at all mixed, it must be by ascetics, who are habitual excessive smokers. Some spices and a little salt is mixed with bhang. Tobacco is mixed with ganja, as I am told by a ganja smoker, for the purpose of preventing the ganja being burnt to ashes quickly. As a rule, ganja cannot be prepared for consumption without mixing tobacco.

Bhang massalas are of various kinds, according to the choice of the consumers of different localities. In Calcutta bhang massala is sold in the bazaar, but I cannot say what its ingredients are.

30. I have already said I have no knowledge of charas. It is the habit of the ganja smokers to take it in company. But people of the upper and middle classes generally take it in solitude. Females of ill-fame almost all smoke ganja in moderation. It is not restricted to any time of life. Boys below ten or twelve scarcely ever take a drug like ganja. But among the ascetics this is not uncommon. It is not at all usual for children to consume any of these drugs.

31. I do not think the habit of smoking ganja has to be acquired slowly, but when it is once formed, it is difficult to break off. Habitual use of bhang can be easily formed and easily broken off. There is a great tendency in the case of ganja for the moderate habit to develop into the excessive, but fortunately the price of this drug having been raised from Rs. 4 to 16 or 20 per seer, the people can hardly afford to smoke in excess. I know many men who care very little to provide necessities to wife and children, or even to himself, but spend all their available means in purchasing ganja.

32. I know there is a religious custom among the lower classes of Hindus of Eastern Bengal who worship an ideal god named Tinnath, in which ganja is absolutely necessary. Boatmen, cultivators, labourers, or menial servants of Hindus, after the day's labour and after supper, meet at one place and each purchases one pice ganja, one pice betel, and one pice of oil. There they smoke this ganja, and chew betel, and sing songs in the name of that god till the oil is burnt. Though only one pice of ganja is required for the religious custom, men consume more ganja and induce others to get into the habit. I am told that of late this custom is disappearing.

33. Bhang is not very much used in Lower Bengal; in Behar it is much used; it is not in disrepute. Ganja is the worst sort of intoxicating drugs, and it is very much in disrepute. All societies of Bengal (except the ascetics) hate it as most disreputable, and think that it is only, if at all necessary, fit to be taken by the meanest of mankind. Such a sentiment is due to the fact that people who use it become as a rule hot-tempered, violent and ugly.

I have already mentioned before that certain low class Hindus require ganja to worship a god called Tinnath; but I am not aware that ganja itself is worshipped by any class.

34. It will be certainly a serious privation to forego the consumption of ganja—(a) to ascetics, (b) to fishermen, (c) to labourers in swampy places.

The ascetics have no other means ordinarily at their disposal to prevent cold except ganja. It keeps them warm all the night and protects them from cold.

Ganja like chilly is a climatic stimulant medicine to those who always expose themselves to cold and damp, and have not other means at their disposal to prevent cold. Those amongst the people who have not got accustomed to ganja frequently take strong tobacco instead.

The probable proportion of each of the above three classes, to whom it would be a serious privation, may be, of ascetics cent. per cent., fishermen and labourers at least 30 per cent.

35. Charas is not, I believe, very much used in Bengal, and therefore it may be feasible to prohibit the use of it. But it matters little whether it is prohibited or permitted to be used to the extent it is now used.

The use of bhang may also be prohibited, for very few persons, except the ascetics, are really in the habit of consuming it. Even those who are habitual moderate consumers can easily break off the habit. It is not necessary to prohibit its use, as it does very little harm to the consumer himself or his family or society at large.

It is a very difficult question to answer as to the feasibility or otherwise of prohibiting the use of ganja. But it is very desirable that the use of it should be gradually restricted by imposing a heavier tax. Already heavy taxation has done some good, and it would be better if the tax were gradually increased—people would consume less.

If its use be suddenly prohibited, there is no doubt that the people will try their best to consume it illicitly, and the result will be to send many people to jail, entailing the greatest misery to their families. Prohibition can only be enforced by gradually restricting its use.

There would be serious discontentment amongst consumers if any law or order were passed all of a sudden. But I do not think this discontentment would amount to any political danger, at least in Bengal, unless taken up by the popular agitators to win the lower classes over for their own political gain.

The prohibition would certainly be followed by recourse to opium.

36. I do not think alcohol is now to any extent substituted for any of these drugs. On the other hand, I believe that this drug is taken instead of alcohol, which is more costly and less easily procured.

37. I am not in a position to give any answer to this question.

38. I am told by a ganja smoker that there is no difference in effects in kind or degree on consumers by the use of the different preparations of ganja (round, flat or chur).

39. I am told smoking of ganja or bhang is less injurious than drinking or eating of the same, for in eating or drinking, the entire property of the ganja enters into the system.

40. Bhang is sometimes prescribed by the kabiraj for both external plaster and internal use in rheumatic pains, and also in case of diarrhoea. The oil prepared from the seeds of ganja is often used for rheumatic pain. I have also seen ganja

boiled in mustard oil, and this oil applied to itch on children. I am not aware that ganja or bhang is used in treating cattle disease. But I have used it for mules and horses suffering from asthma and cold. Camel-drivers also use it, I believe, as medicine.

41. (a) The moderate occasional use of ganja or bhang is beneficial as a digestive.

(b) Habitual moderate use of ganja is beneficial for the prevention of exposure and alleviation of fatigue.

(c) I certainly think that it is beneficial as a febrifuge or preventive of disease in malarious tracts. I saw it used with marked effect in the Chittagong Hill Tracts and in Naogaon. It is also said that, owing to cultivation of ganja, there is much less malaria than in adjoining places.

About 25 per cent. of the labouring class, I believe, use ganja to alleviate fatigue, and nearly 75 or 80 per cent. of the ascetics use ganja to counteract exposure, and the rest use bhang for the same purpose. I am not aware what particular class use ganja for digestive purposes.

42. The moderate use of bhang appears to be harmless. Those who use bhang are never violent like ganja smokers.

43. Generally the moderate smokers are not as offensive as those who go to excess, yet even they occasionally become offensive to their neighbours, and especially to the members of their family, and when he is in need of means to purchase ganja, he will sell off or pledge the household utensils to purchase ganja.

44. The immediate effect of the moderation of ganja on the habitual consumer is certainly refreshing. It produces intoxication. I do not think it creates appetite, if it is taken habitually. It rather kills hunger by habitual use. To habitual excessive smokers its effect lasts for a short time; to moderate habitual smokers it lasts perhaps up to the time fixed for taking another dose, and to occasional smokers its effect may continue for twenty-four hours or more.

Subsequent want of gratification produces longing and sometimes great uneasiness to habitual consumers.

45. Habitual moderate use of bhang is, as I have already stated, harmless in every respect.

(a) Ganja reduces the body to a skeleton, unless ghi, butter, or milk is taken with nutritious food, but such things can rarely be obtained by most ganja smokers. It is, I believe, for this reason that the better classes can take ganja for years without harm. Habitual moderate smokers remain healthy.

(b) I think by habitual moderate smoking of ganja a man loses his ordinary appetite.

(c) It often causes dysentery to those who cannot provide for good diet. I have not seen any case of bronchitis or asthma caused by moderate habitual use of ganja.

(d) It scarcely induces immorality or debauchery, but it induces laziness.

(e) It deadens the intellect, according to the quantity of ganja consumed by each smoker, and I believe it produces insanity to those who go to excess and cannot afford rich food. Liquor bright-

ens the intellect; ganja deadens it. I have not seen one drunkard insane, but I have seen many ganja smokers subject to it, especially those who take two different drugs, or liquor and drugs. The type of insanity is generally of a violent type. There are again some who become morose and will not speak. Some were found to be better some time after giving up the habit, and others were permanently insane.

I cannot say whether any of those ganja smokers, whom I have known to be insane, had or had not mental anxiety or brain disease prior to their acquiring the habit of using the drug.

46. I have already said that habitual excessive use of ganja produces the evils enumerated in the above paragraph to a greater extent.

47. I do not know that the habitual moderate use of any of these drugs can be hereditary, or that it affects in any way the children of the moderate consumer. I believe not.

48. Now and then it is said that children of the habitual excessive smoker of ganja are bad-tempered and violent, but in a very few instances.

49. I have heard that ganja is sometimes taken moderately by men indulging in debauchery as an aphrodisiac, and it is also so used by some prostitutes. I cannot say whether the use of ganja for this purpose is more injurious than its use as an ordinary narcotic. Hemp used in this way would tend to produce impotence. Generally those who are excessive smokers are not at all prone to debauchery, like those who indulge in drinking.

50. This is answered in the latter part of the above question.

51. There is not a large proportion of bad characters who are habitual moderate consumers of these drugs. They may have some connection with hurt cases and sometimes with petty thefts to enable them to purchase ganja.

52. Some of the habitual excessive smokers of ganja are occasionally known to commit culpable homicide or grievous hurt.

53. Excessive indulgence in ganja does incite to violent crime. I know of a case where a smoker suddenly murdered a vendor because he would not supply him with more ganja.

54. I have heard of ganja being used to fortify the courage of criminals about to commit premeditated acts of violence.

55. I do not know that ganja was ever used to stupefy the intended victims by criminals. I have known cases where it has been mixed with dhatura seed for purposes of crime. This is generally practised on prostitutes prior to robbing them.

57. There is danger of unintentionally taking too much by taking ganja internally.

58. I believe that there is much smuggling and room for much improvement, but it requires money.

59. I would insist upon closer and more frequent inspection of stocks. The cultivators do pretty well what they like at present.

60. The control is very weak. I would put the whole business on the same footing as opium, make advances, buy up the crop, store it in godowns, and issue it under passes to Collectors of districts.

62. No.

63. A wholesale vendor has numerous shops for retail sale either in his own name or *benami*, and he also advances money to the cultivators for growing ganja, and in some cases he is virtually a partner of the cultivators. This combination of three different interests in one person should be prohibited or discouraged as far as possible to prevent smuggling. At present a retail vendor can sell 20 tolas or one *powa* of ganja to one man. I think that this should be restricted to 5 tolas or one *chhattack*, like opium, to prevent smuggling as well as excessive use of ganja by the consumers. Names of buyers should also be registered, and consumption on the premises prohibited.

64. I do not think there is any objection to the existing regulation governing the export and import of ganja or its preparations.

65. The taxation of ganja is too low still.

66. Certainly there should be different rates of taxation for different kinds of ganja. The *chur* or broken ganja being without thick branches should be taxed at a higher rate per maund or *seer* than flat ganja, which is sold with the thick branches. I cannot say much about round ganja, except that it has also no very thick branches like the flat. This round ganja is preferred only by the people living in Calcutta and neighbouring districts.

67. I do not think there is any objection to the present method of taxation. I would not tax *bhang*.

68. In many places I have seen retail shops of ganja crowded with smokers all day. I have already given my opinion that no person should be allowed to smoke on the shop premises.

69. I am not aware that the wishes of the people are consulted or considered in any way before a shop is opened in any locality. I would not consult the people; it is impossible to get any but interested opinions. Excise officers, often for their own credit, create a shop at their option where it is not at all required. I would place it in the hands of very high authority to sanction the establishment of shops. Of course, if the people themselves move in the matter, their wishes might be duly considered.

70. I believe there is much smuggling of ganja from the Native States about Chota Nagpur, particularly Surguja.

Oral evidence.

Question 45.—I have personally found villagers attributing their dysentery to ganja. I have generally accused them of excess and they have denied it, and I have made no further enquiries.

I am constantly on tour, and when I see an insane man in a village, I ask people to what it is due, and I have been told it is due to ganja smoking in certain cases. I think liquor causes insanity amongst natives. When a man is brought before me insane from ganja, I have generally found that he has used some other drug or liquor as well, and sometimes all these, and I can't of course say which of these things may have caused the insanity. When I say that I have not seen one drunkard to be insane, I mean one who uses liquor alone. I sometimes enquire for such men's relatives to see whether they will take charge of them. I have asked relatives regarding the cause of insanity, and have accepted their statements that it was due to ganja generally without going into details.

Question 52.—I have recollection of a case in

which a man set fire to a house under the influence of the cravings for ganja, after the immediate effects had passed off. One case of this kind occurred in the Nadia district. The case was reported to me as having happened some years before, and I was not concerned in dealing with it myself. Another similar case occurred in the Pabna district in 1892, and I think it appeared at the trial that the case had arisen out of ganja smoking. In this case the man was convicted. The case occurred in 1892, and was tried by the senior Deputy Magistrate of Pabna.

The only case of culpable homicide which has come within my knowledge is that mentioned in answer 53. It occurred in the Rajshahi district in 1892. The case was tried in the Sessions Court, and the offender was sentenced to five years' rigorous imprisonment. I think the motive was mentioned in the judgment; it certainly was in the Police papers.

I know a case in which a notorious ganja smoker burnt his child and hacked it about. This occurred recently. When under trial for torture of his child, he went back to his house and hacked his wife and her father with a knife, and killed another man who came to their rescue. He was then on bail. He was tried for the murder, and convicted and transported for life. I know he was a very violent man, and I attribute a great deal of his violence to his habit of ganja smoking. He was an habitual excessive smoker. This case occurred in the Rajshahi district two months ago. I have not seen the judgment in the case. The man was *dafti* of the District Engineer, but I do not know his name. I have no recollection of any other case.

My meaning in answer 52 is that when ganja consumers do commit crime, I attribute it to the craving after the effects of a dose have passed off, if the man is crossed. Such crimes committed by other persons may be attributed to a special motive. If in the ganja smoker's case I found a sufficient motive, I should not hold the ganja responsible.

The case I have described above is the only one in which I have authentic information of a man making a violent assault with a dangerous weapon upon an adverse witness. I should not have been more astonished to hear of the case if the man had not been a ganja smoker than I was under the circumstances.

Question 54.—I have heard from confessing prisoners that ganja is taken by lathials, dacoits, and such persons to fortify themselves. I do not think a man would take liquor for the same purpose. I have asked Doms and Dosadhs and other up-country people whether they take liquor for this purpose, and they have told me that they do not. These classes are mostly *chaudkidars*. These men take *bhang* as well as liquor. I do not think they would take *bhang* before committing an act of premeditated violence. One of these men, who was not a ganja smoker, would not take ganja as an experiment, but he would take it if he were a smoker for the exhilarating effect. That is to say, ganja is considered a superior intoxicant than liquor. I look upon *bhang* as almost harmless and a much less potent intoxicant than ganja. An up-country man would not take it, nor would a Bengali ganja smoker. The former does not take stimulant at all before committing a premeditated act of violence unless he is a ganja smoker, and the latter would prefer his ganja. It may be that the up-country man has not the same necessity for Dutch courage.

Note (on records of cases submitted by MR. WARD) by the Commission, appended to Mr. Ward's evidence.

1. *Empress vs. Hanif Shaha.*—The accused was a ganja smoker and visited the shop of the deceased, a ganja vendor. The former had a knife in his hand, as he had been eating fruit. An altercation arose between the two, in the course of which the deceased struck the accused with a split bamboo, on which the accused stabbed him in the abdomen with the knife. "It is certain," says the Judge, "that it was Betal Ali who had first struck the accused with the split bamboo; and it was then that he wounded him with his knife." The prisoner was sentenced to five years' rigorous imprisonment on 30th June 1892.

2. *Empress vs. Isahaq Shaikh.*—The accused Ishaq Shaikh had injured his child and was prosecuted for his act. The following extract from the judgment in the murder case shows both his character and how that case arose: "His conduct towards his little daughter shows how cruel he is. His daughter, a little girl of five years, brought to

her father more *tikas* than he wanted; and this enraged him so much that he assaulted her brutally; and the assault was such that she got her leg broken and got wounds on different parts of her body. A complaint was made against the accused on the 23rd December. His wife, father-in-law and Kadar Khan gave evidence in that case; and this enraged him so much that he contemplated the plan of aiming at the life of his wife. He had left his father-in-law's or had been compelled to leave it; and when he was in his sister's, he saw his wife go to the privy, and there he went and attacked her." He was interrupted and fought with those who interrupted him; and in the course of the fight he killed Kadar Khan. There is no mention of ganja. The man was sentenced to transportation for life on 28th February 1894.

3. It is reported that the record in the Pubna case has been destroyed, as the man was released by the High Court.

90. *Evidence of BABU MATHURA MOHAN SIEKAR, Inspector of Police, Jhenida, District Jessore.*

1. My knowledge is confined to a few districts in Bengal, and what I have acquired is from my own experience and conversation I had on the subject with several persons.

2. Besides the three narcotic articles named here, there is another kind of ganja preparation used among the Khottas, up-country men, living in Bengal, called majum, prepared with sugar. I know of no other kind of ganja sold in market.

3. Ganja grows luxuriantly in almost all the eastern districts of Bengal, and in other parts also it grows, but not of superior quality. Part of Pabna and Rajshahi are the two districts where it is abundant.

4. Wild siddhi, called buna bhang, is common in almost every place where the soil is moist.

5. As far as I know, where there is little moisture of soil and the climate is mild, it tends its growth.

6. Wild bhang almost grows densely where it finds sufficient moisture.

7. I know of no place in my province where any kind of these narcotics is cultivated, but wild bhang is in use by men where it is not found in nearest bazaars.

10. Sometimes it is found that ganja plants grow spontaneously near the resort of ganja smokers from the seeds thrown about, but care then tends its luxuriant growth and makes it bear flower, but not of that superior quality as sold by vendors. These smokers do not regularly cultivate it, but simply take care of the plant or plants to allow them to take its natural growth.

12. I do not suppose that wild hemp can be cultivated for the ganja production, and I never saw it cultivated.

14. No.

15. Majum, a kind of hemp preparation with sweets, and *khatta* with *gur*, are used, as it is said, by Khottas, for eating.

16. I never saw or heard even of ganja and charas being ever prepared from the wild plant. Bhang can be prepared from the hemp plant

wherever grown, though it may not be of the same superior quantity.

17. Majum and khatta, both preparations of hemp, are both made and used generally by the Khottas, Agarwalas, and Banias. A few Bengali lads use them occasionally also.

18. Dampness, as it is said, is the cause of deterioration of bhang; and to prevent deterioration, wild bhang is kept suspended on beams or kept far above the ground in air and light to be kept for about a year, after which it loses its effect.

19. Ganja and charas are generally used for smoking.

20. Men of all classes smoke ganja and charas. The sadhus, holy mendicants and their followers, some of the lower class of people who commit offences at nights, and those who follow the profession of singing in all localities, are found to smoke them.

21. Both flat and round ganja are preferred according to taste.

22. Charas, which is called Nepali charas, is chiefly used, but if Nepal produces charas or not, I do not know.

23. I never saw or heard of bhang being smoked. It is only, as I know, drunk.

24. Ditto. Men of all class drink bhang. The imposition of high duty on liquor, which made rise of its price, has made several men of middle class, who cannot afford to buy liquor, to drink bhang in consequence.

25. The rise of the price of liquor has rather increased the number of bhang drinkers and ganja smokers.

26. Among the ganja smokers and bhang drinkers—

(a) $\frac{1}{2}$ are habitual moderate consumers.

(b) About $\frac{1}{4}$ habitual excessive consumers.

(c) „ $\frac{1}{8}$ occasional moderate consumers.

(d) „ $\frac{1}{8}$ occasional excessive consumers.

27. Men of all classes of the people are in the habit of smoking ganja, drinking bhang, etc. The fakirs, bairnabs, sanyasis, and other classes of men, who are almost homeless and have no friends, generally smoke ganja or drink bhang. Several middle-class people, who could afford to pay for drinking before, owing to backward circumstances or for want of means, when they become poor, generally become ganja smokers or bhang drinkers at last, and lead a life of misery. School-boys who have a tendency for music take first to moderate ganja smoking and then go to the excess and fall in life.

28. (a) Two annas a day for each moderate.

(b) Eight annas a day for each excessive.

29. Tobacco leaf is ordinarily mixed with ganja for smoking. To make the bhang drink strong sometimes dhatura seeds are mixed with bhang, but is done by the sanyasis. Bhang massalas are—mouri, pepper, milk, sugar, almond, etc.

30. Men of some respectability and sons of gentlemen consume these drugs in solitude, but the habitual consumers of higher class of people form a company and smoke in solitude too, but others consume it publicly and do not care for society.

31. The habit of consuming these drugs is easily formed. When the habit is formed it is difficult to break off, and gradually moderate smokers go to excess.

32. There is no custom essentially necessary for social or religious purposes, but the smokers generally make a rule among themselves as to who will become Shaivas of Trinath's worshippers, and, with a view to allure others, give out that ganja smoking or bhang-drinking is necessary. Illiterate men commonly fall victims to such allurements.

33. All the sober men hate these consumers but the jogis and sanyasis, who pretend to lead a religious life generally, for their good-will are regarded and their habits overlooked. On Durga puja

submersion festival day, it is a general custom among the Hindus to drink bhang in a moderate dose, but this custom does not affect in any way the society.

34. The gentlemen class may, with little difficulty, forego the consumption, notwithstanding they might have been habituated from a long time past, by substituting opium or liquor in its place; but for the others, such as the lower class of people, whose means do not afford for such substitution, and the sanyasis, who do not and cannot take liquor, etc., it would be a little difficult for them to give up the habit at once. About three-fourths of the total consumers of these drugs consist of sanyasis and poor men, who would feel some difficulty in foregoing the use.

35. Prohibition of the use of ganja might be feasible, and illicit consumption might not take place as ganja does not grow wild in all places. Though some sort of discontent may arise among the lower class of smokers, it would not last long and would soon die away, and no political danger could be apprehended. A few consumers having means to use alcoholic stimulant might go to that side by the prohibition.

36. Alcohol in certain places has been substituted for ganja, but such substitution is very few, as smokers very seldom rise to position and society.

41. May not.

42. The use of ganja and bhang always produces injurious effects. The ganja smokers often become hot-tempered, and cannot have control over their passions. They often get dysentery which ceases their existence.

43. No. They are always troublesome, except one or two per cent.

47. Yes, to some extent.

53. I know of two cases in which two ganja smokers committed murders—one for gain and the other in heat of provocation.

91. Evidence of Mr. H. P. WYLLY,* Government Agent at Keonjhar, Orissa.

1. About eleven years' administration of Native States in the Orissa Gurjat Mahals.

2. Yes, with regard to bhang and ganja.

3. Is grown in all the Orissa Gurjat Mahals. To what extent, careful local enquiry only could denote; but its cultivation in these Mahals is fairly extensive.

4. The plant is locally named according to size of the leaf buds, i.e., the tree yielding the big bud is called the *Bhaluki*; that yielding small bud is known as *Cheli-neuda*.

5. The Mahals alluded to vary from 200 to 1,500 feet above sea-level. They are liable to the same climatic influences as the Orissa delta, and the wild as well as cultivated hemp plant thrives in these Mahals.

6. Scattered.

7. (a) Yes.

(b) No.

(c) Yes.

(d) No, except to re-sow.

Can't say accurately to what extent.

8. Can give no reasonable opinion about this.

9. Grown in seed-beds in April and May; transplanted in June or July; reaped in December; flowers in October and November. The male

plant is emasculated by having its stem punctured or cut and pieces of broken tile inserted in these cuts.

10. Not necessarily. Have known Hindus as well as Muhammadans to cultivate it for their own use as well as for sale.

11. Yes.

12. The plant cultivated in the Gurjat Mahals is usually from the previous year's garden or home-grown seeds. The seed of the wild hemp plant is utilised if the home seed fails.

13. No restrictions placed on the cultivation and sale of ganja in any Gurjat State in Orissa. Its cultivation is, I think, common to all the seventeen States. I know of no State where its cultivation would be impossible.

14. (a) Yes.

(b) No.

(c) Yes.

Can't say where and to what extent.

15. For ganja, the flower bud is dried, rubbed into powder, and smoked in a chillum with ground tobacco. For bhang, the dried and pounded leaf only is used; the mixture contains pounded hemp leaves, black pepper, and spices dissolved in water and drunk.

* Was summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

16. (a) Yes, by the bhang consumers.
 (b) Yes.
 (c) Yes, with regard to ganja.
17. By all classes and castes, Hindus and Muhammadans.
18. Does deteriorate; yes, decidedly loses its effect. Would be almost useless after about two years; exposure is the cause of deterioration. If kept in a cool and moist vessel and air excluded as much as possible, might be kept for two years.
19. Ganja is smoked, also used medicinally with other ingredients, spices, sugar, etc., and taken as a pill. It is thus used medicinally for bowel complaints and various other diseases.
20. Cannot say. Careful and lengthy enquiry would be necessary to obtain this information with anything like accuracy.
21. Flat ganja.
22. I know nothing about charas.
23. Yes; can't say to what extent, but only, I think, as a substitute for the ganja when the latter is not obtainable.
24. I cannot give figures.
25. I cannot give any opinion. Reliable natives tell me that the habit of ganja-smoking is increasing, but their views are, in my opinion, founded on no data.
26. Could not say.
28. (a) About 2 to 3 pice per day.
 (b) About 5 to 6 pice per day.
- The local price of a bud is one pice, and one bud would suffice for two chillums or two smokes. A heavy smoker will want 10 to 12 chillums per day.
29. For ganja, tobacco and spices; for bhang, see answer to 15.
- Yes. Contains usually, pepper, nutmeg, cloves, cucumber seeds, cinnamon and cardamoms, sugar or molasses.
30. Practised in solitude as well as in company. Quite exceptional for women to smoke ganja or drink bhang, but youths, boys of fifteen or sixteen, take to it, and these become the confirmed ganja smokers.
31. Yes, to all three queries.
32. I know of no social or religious custom which entails the consumption of ganja or bhang. But confirmed smokers will make a visit to these Hindu temples an excuse to consume an extra quantity.
33. (a) Respectable Hindu as well as Muhammadan society regard confirmed ganja smokers and bhang drinkers with distrust.
 (c) Not that I am aware of.
34. Yes, to the same extent as it would be to deprive the habitual toper of his dram. Can give no figures.
35. (a) Not in the Gurjat Mahals.
 (b) Yes, and with ease.
 (c) Only at a cost which would be prohibitive.
 (d) Yes.
 (e) No.
 (f) Probably to both.
36. No.
37. Know nothing about charas.
38. Can't say.

39. To smoke ganja and inhale the smoke is more injurious than simply to smoke it. Ganja smoking is said to be more injurious than bhang drinking. These ideas had been obtained from ganja smokers and bhang consumers.

40. Yes; both ganja and bhang. The latter is supposed to contain cooling properties, and is occasionally given medicinally to women.

41. The question is one for a medical man. I am not prepared to give any opinion.

42. The bhang drinking, if not carried to excess, appears to me as harmless as the moderate consumption of opium. This is only an opinion. Ganja smoking stands on a different footing, and I am doubtful if the habit once acquired could even be moderately indulged in.

43. Yes, so far as my experience goes.

44. (a) and (b) Refreshing.

(d) Yes.

(e) Yes to the *beginner* only.

(f) An hour or two.

(g) Listlessness. A feeling of general inaptitude to do anything. A craving for another chillum or smoke.

(h) Yes.

But in considering these answers omit the word *moderate*.

45 and 46. I am not prepared to answer this question.

47 and 48. Yes, apparently so, judging from the information consumers have given me.

49 and 50. Can't say.

51 and 52. (a) Can't say.

(b) None to my knowledge; but it stands to reason that the habitual ganja smoker is no more reliable than a habitual drunkard; both habits blunt the moral sense.

53. Under the influence of both ganja and bhang serious crime has been known, though none such have come under my personal notice.

54. Habitual smokers and drinkers would, of course, resort to their favourite beverages before committing any crime or act of violence. This indulgence would give them the necessary amount of Dutch courage.

55. (a) None such have come under my personal notice. Have heard of this being practised of pilgrims.

(b) Yes; especially if given to those not used to either drug.

56. Can't say.

57. Have given in previous questions all information I can supply on these points.

58. In the Gurjat Mahals each Raja or Chief follows his own system as regards excise administration, and I am not aware that in any one State there is any restriction placed on the cultivation of the hemp plant. Those chiefs being independent, no special control over their excise administration from outside or by the British Government is exercised. In fact, the licensed storekeepers and retail sellers of ganja in the Mogalbandi or Regulation Districts of Orissa draw their supplies of ganja from many of the Native States I allude to with the sanction of the Mogalbandi authorities. I, like, I imagine, most British officers, would like to see the cultivation of the hemp plant and the preparation and sale of ganja under some kind of control in these Native States, and this under

existing circumstances is for political reasons not possible.

I am not thoroughly acquainted with the excise system in the Regulation Districts, but there the cultivation of the hemp is, I believe, interdicted, while arrangements exist for allowing confirmed ganja-smokers and bhang-consumers to obtain their favourite drugs from licensed sellers. I would restrict the wholesale as well as retail sale of ganja as much as possible, leaving the district officer to decide what the safe limit is.

64. No ganja is imported into the Gurjat States from the Mogalbandi Districts, but both hemp and ganja are freely exported under passes granted by the Regulation District officers from these Native States. Were I a native chief, I should raise the export duty on these consignments to the highest payable limit. At present, and to my knowledge, none of the chiefs collect any such export duty, and ganja is therefore much cheaper

than it should be. I have no objections to the existing Mogalbandi regulations.

65. Not knowing what the rates of taxation in the Mogalbandi are, I can give no opinion.

66. I see no reason to suggest differential rates of taxation.

67. See answer to 65.

68. None to my knowledge in the States under the administration of these chiefs.

69. See above.

70. In the case of a plant or drug so easily reared and prepared, practically without restriction in Native States in Orissa, there must be constant smuggling, on a small scale, into the adjoining Regulation Districts. The actual harm done is, however, so infinitesimal, and to such a very small proportion of the Orissa population, that any more stringent measures than now exist appear to me uncalled for and unnecessary.

92. Evidence of Mr. W. R. RICKETTS,* *Manager, Nilgiri State, Tributary Mahals, Orissa.*

1. As a member of the Provincial service, I have had charge of the Excise Department both at the Sudder Station and Sub-Division, and for the last nine and a half years I have had entire charge as Manager of the Excise Administration in the Native State of Nilgiri, one of the Tributary States in the province of Orissa.

2. The definitions are correct as regards siddhi or bhang or ganja (round, flat and broken). Bhang is commonly known in this province by the name of "patti." Charas is not used in Orissa, except by visitors from the north of India and Behar.

3. In north of Balasore and in the Native States of Maurbhanj and Keonjhar, the hemp plant grows spontaneously, but not in very large quantities. In Nilgiri very few cultivate the plant in their kitchen gardens, but only use it as patti. No ganja is cultivated.

4. It is only known as ganja here. I don't know of any other name being applied to the plant.

5. It requires damp, loose soil, and mostly grows spontaneously near the sea and close to rivers.

6. Where it grows, it is dense.

7. In North Balasore, Maurbhanj and Keonjhar it is cultivated only for bhang. The little ganja is of a very poor quality. Proportionately speaking, it is grown in a small quantity. The fibre is not used, nor does any exist. Some few keep seeds for cultivation.

8. There has been a decided decrease in the area under cultivation, mainly due to the article which can be purchased being much superior and consequently preferred by consumers.

10. They belong to all classes in this province.

11. Wild hemp as a rule won't produce ganja; when it does, the quality is very inferior.

12. I don't know of any such district.

13. Ganja cultivation is restricted in Orissa in all districts, but not in the Tributary States. In the latter, a very small quantity is cultivated, but, as I have said before, of a very inferior quality. The cultivation of ganja requires very heavy dew,

which does not fall here. It would be impossible to cultivate good ganja in Orissa.

14. Inferior ganja and bhang, both in small quantities. Ganja is prepared only in the Tributary States; bhang in the Tributary States and in the district of Balasore. No charas is prepared in this province.

16. Bhang is usually prepared in this province by the people in their own houses from the wild hemp wherever it grows spontaneously. Ganja can be prepared from the wild plant, but the quality is inferior.

17. In Orissa and the Tributary States bhang and inferior ganja to a small extent are prepared by all classes.

18. Both ganja and bhang deteriorate by keeping. After about eighteen months they quite lose their effect; they keep good with ordinary care for about a year. The resinous substance evaporates. The measure usually taken to preserve ganja and bhang is to exclude it as much as possible from the air.

19. In Orissa and the Tributary States ganja is mostly used for smoking mixed with prepared tobacco; it is also to a small extent eaten with pan and drunk. For drinking purposes it is mixed with a concoction prepared with water, black pepper, and hot spices, to which sometimes sugar is added to make it stronger. Ganja is drunk principally in the Puri District, but it is smoked all over the province.

20. Both the high and low classes of people in Orissa smoke ganja, but I should say a small number in proportion to the population.

21. Round ganja is always preferred here for smoking, and is usually used for this purpose in all parts of the province and the Gurjat States.

23. Bhang is not used for smoking in Orissa or the Native States here.

24. All classes in all localities in Orissa and the Native States drink and eat bhang, but by far the larger number of consumers drink it, as I have already described.

25. I should say the use of ganja and bhang is decidedly on the increase. The drugs are becoming more popular, as they are within the means of all

* Was summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

classes, and the Brahmins and people of higher caste now use it to a great extent, and their example is being followed by the people in general.

26. Ganja—

- (a) 75 per cent.
- (b) 10 "
- (c) 10 "
- (d) 5 "

Only about 10 per cent. of the bhang-consumers drink it habitually, and very few indeed take it to excess. Most consumers take it occasionally only at special times.

27. (a) All classes who can afford it, and have much spare time. An indolent and inactive life generally leads to the habitual use of ganja.

(b) Mostly religious mendicants and ascetics, such as Babajis and Boishnabs. From the nature of their lives they generally take it to excess.

(c) The middle class of people whenever they have the time and opportunity.

(d) Labourers, such as stone-cutters, masons, etc., after an unusually hard day's work.

28. (a) $\frac{1}{2}$ to $\frac{1}{4}$ tola per diem; cost 2 pice to one anna.

(b) 1 to 2 tolas per diem; cost 4 annas to 8 annas.

A Babaji has been known to smoke 20 tolas in one day.

29. Raw tobacco is indispensable for ganja-smoking, and is alone used. Dhatura is very seldom used with bhang, and only by excessive consumers. Bhang is mixed with water and spices to give it a flavour, and the addition of sugar makes it stronger. It is also generally believed that spices mollify the evil effects of bhang. Tobacco increases the narcotic effects of ganja. In this province a bhang massala is sold, consisting of pepper, aniseed, poppy seeds, cloves, cardamoms, and the seeds of the cucumber. This massala when mixed with bhang has a decidedly mollifying effect.

30. About 75 per cent. of the ganja-consumers prefer company, and 75 per cent. of the bhang-consumers prefer solitude. The consumption of these drugs is mainly confined to the male sex and prostitutes. Children very rarely smoke ganja, and bhang is never used by them.

31. The habit of taking ganja is easily formed, and once formed difficult to break off, especially in the cases of excessive consumers. Bhang, however, can be relinquished without much difficulty. There is certainly a tendency for the moderate habit to develop into the excessive.

32. During the social ceremony of "Bijaya" bhang is essential, and even persons who never take it are compelled to do so on this occasion, or at least to touch it, and put some on their heads. When Durga is worshipped, an offering of bhang is made, and Siva is offered both bhang and ganja when worshipped. The use on these occasions is always temperate and not likely to lead to habit, nor is it injurious.

33. All intoxicating drugs are held in disrepute by the Hindu, and no respectable person will smoke ganja or drink bhang in public, and will always deny its use if charged with the practice.

All narcotics are in disrepute, being generally tabooed by the respectable Hindu community. The worship of the hemp plant is not known in Orissa.

34. The privation would not cause any serious injury, but to give up ganja suddenly would cause much discomfort to the habitual consumer, though this uneasiness would be only temporary. Bhang could more easily be given up, as it is seldom taken to excess.

35. I do not consider it would be expedient or necessary to prohibit altogether the use of any of these drugs, but after a careful investigation measures may be adopted to control its consumption. Both ganja and bhang would certainly be consumed illicitly in the case of prohibition, and at least for a time any amount of careful watching would not wholly prevent it. Its total prohibition would cause much discontent among the consumers, almost amounting to a political danger. The majority of excessive consumers are to be found among the Boishnabs and Babajis, who are held in veneration by the people, and these classes, together with the high caste men in the habit of taking the drug, would soon incite the mob against any orders of prohibition. Prohibitive measures should be taken gradually; raising the price of the drug in the first instance to such an extent as would put it beyond the means of the mass of people, would perhaps decrease its use, and be less dangerous hereafter politically. The prohibition would not be followed by recourse to alcoholic stimulants, but possibly to opium.

36. I don't think so, for ganja-smokers and bhang-consumers have a particular aversion to alcohol.

37. Charas is considered milder than ganja, and its effect is more gradual.

38. The round ganja is the strongest, and then the flat kind. The round ganja also causes no irritation to the throat, which the flat and chur do.

39. Smoking is less injurious than drinking or eating ganja, though the effect is instantaneous. A ganja-smoker cannot take more than one full draw at one time, hence the drug is usually smoked in company, and the chillum passed round. The effect of smoking also lasts only three or four hours, whereas eating and drinking for ten or twelve hours.

40. Both ganja and bhang are administered internally as a stomachic by native doctors (kabi-rajies), but I should think with doubtful effect. Locally bhang is used internally for cattle suffering from stomach disorders, and is believed to have a cooling effect. Externally a solution or paste of either ganja or bhang is used for rinderpest, destroying cattle insects and allaying irritation of the skin.

38. (a) Neither ganja nor bhang are accessories to food, but act as a digestive on certain constitutions. The majority of ganja and bhang consumers have large appetites and eat a great quantity.

(b) Ganja gives staying power to a certain extent; for instance, Hindu religious mendicants after excessive smoking will expose themselves to rain for days without any evil result, and also walk long distances; but this effect is only on habitual smokers. The drug also alleviates fatigue in those accustomed to take it.

(c) Neither ganja nor bhang are considered a febrifuge, but the lower classes believe it to be a preventive of malaria ; but I don't think this is the case.

(d) It is commonly believed that ganja or bhang drives away snakes, but this I consider to be pure fiction.

My above remarks refer to habitual consumers, but I don't think they use ganja or bhang for these purposes ; they generally contract the habit and it grows on them.

42. I don't believe even the moderate use of ganja and bhang to be harmless ; they both cause a gradual failure of health and strength, and they certainly weaken the brains. This I have noticed in those who take the drugs, and who may be recognized by the redness and dilation of the eyes, and their veins invariably stand out prominently.

43. Ganja smokers are generally avoided by their neighbours ; they are of very uncertain temper, and the term "ganja smoker" is used as an abuse.

44. The immediate effect of both ganja and bhang is refreshing, and produces slight intoxication if taken in moderation. They do not allay hunger, though they may give temporary or, I should say, merely momentary relief. Ganja creates appetite. The effect of ganja smoking lasts three or four hours ; eating and drinking ganja or bhang ten to twelve hours. The after-effects are depression and reaction, and also a craving for more.

45. Bhang and ganja produce noxious effects, physically, mentally and morally. They gradually impair the constitution, though helping digestion and creating appetite. The moderate use of these two drugs does not cause dysentery, bronchitis or asthma. Smoking ganja is used as a remedy for asthma. They certainly induce laziness and habits of immorality and debauchery, and gradually impair the intellect, but moderate use does not produce insanity.

46. A prolonged excessive use of ganja produces insanity, and a case of this kind was prominently brought to my notice when in charge of the Bhadrak Sub-Division in the Balasore District. The man I refer to was totally insane and belonged to the middle class, and had been serving Europeans in the capacity of Sirdar Behara, but on enquiry I found he had been brought to the condition in which I found him by the excessive use of ganja. About six months after, he came to me at Nilgiri asking for service and apparently quite sane, from which instance, I conclude, insanity produced by ganja is temporary. The typical symptoms are great violence, insensibility to pain, and irritation of the skin. No ganja

smoker rendered insane will confess to its use ; the mere mention of the drug nearly drives him wild.

I don't think insanity tends to indulgence in the use of hemp drugs unless the person has previously been accustomed to take them. The habit of consuming these drugs is an acquired one and gradually grows on one. The taste at first I believe is anything but pleasant.

47 and 48. The habitual moderate or excessive use of ganja or bhang does not appear to be hereditary, nor does the habit affect in any way the children of the moderate or excessive consumer.

49. The moderate use of ganja is practised to excite venereal desire, and is known to be employed for this purpose by prostitutes. When so used, it is certainly more injurious than as an ordinary narcotic, as the injurious effect caused by the drug is more permanent. The use of hemp decidedly produces impotence.

50. Excessive use merely produces greater impotence, and is more injurious.

51. There are very few criminals among the moderate consumers. I should say moderate consumption of ganja or bhang has no connection with crime generally, or crime of a special character.

52. Excessive consumption of both ganja and bhang leads in all probability to crime, the consumers not being responsible for their actions owing to the intoxicating effects. Usually crimes of a daring nature, and those attended by violence, are committed by ganja consumers.

53. Yes ; the slightest provocation would incite acts of violence wholly unpremeditated. I know of no case in which excessive indulgence in these drugs has led to temporary homicidal frenzy ; but, of course, insanity caused by excessive consumption of ganja produces the disease, invariably attended with great violence.

54. Yes ; such cases have been known.

55. Yes. I have heard of such instances though none have come under my own observation. Complete stupefaction can be induced by bhang if taken in sufficient quantity.

56. Moderate consumers of ganja and bhang hardly ever use any admixture, except tobacco which is essential to smoking ganja. Those who take the drugs to excess frequently mix dhatura with both, more especially with bhang. In cases of criminal drugging, bhang is often mixed with dhatura, which causes almost immediate and complete stupefaction.

57. The results from eating and drinking ganja are pretty nearly the same as from smoking the drug. Only in the former the effects last much longer, and consequently are more injurious.

93. Evidence of MAHAMAHOPADHYA MAHESA CHANDRA NYAYARATNA, C. I. E., *Brahmin, Principal, Government Sanskrit College, Calcutta.*

1. I have very little information and knowledge regarding the hemp drug. The sources of my information on the few questions I have answered will appear under each question answered.

2. These definitions may be accepted. The local names are siddhi or bhang, ganja and charas. Other names are samvida and bijaya. The Sanskrit lexicons give other names also, e.g., matangi, chapala, ajaya, ananda, harshini, jaya, etc.

4. I have heard of the plant being called the ganja plant or the siddhi plant, but never as the charas plant.

20. Ganja is almost invariably smoked by sanyasis. Hackney carriage and cart drivers, mechanics, day labourers, and Brahmin cooks engaged by the day are often found to have contracted the habit of smoking ganja. Some Uriyas smoke ganja with tobacco and other leaves.

24. Up-country darwans generally drink or swallow pastes of bhang prepared with other ingredients according to taste.

26. As for bhang or siddhi, few are excessive consumers. I have, however, heard of one or two hard drunkards having left the bottle to take to massive doses of siddhi every day. Most people who drink siddhi for exhilaration do so occasionally and in moderate quantities. Ganja smokers are generally regular consumers, and many are excessive smokers. Of charas consumers I have no information. They are believed to be habitual consumers.

27. It is company and association that lead to the practice of taking ganja and charas. Another cause of these two drugs being in use among the poorer classes and amongst ascetics (sanyasis) is the cheapness of the drugs. Their effect in producing intoxication being almost instantaneous, may be another reason for their use. The sanyasis regard the use of ganja as essential to preserve health. It may be that it temporarily wards off the effects of exposure to wind, rain and sun. Habitual drinkers of siddhi take it as a mild and inexpensive intoxicating drug.

29. Sugar, spices and fragrant leaves, such as rose leaves and sometimes rose water also are mixed with bhang. Ganja is generally smoked alone or with tobacco leaves. Dhatura is sometimes mixed.

31. I believe that the habit of smoking ganja and charas cannot be easily shaken off. I know of a man who was a ganja smoker, and whose father, being apprised of the fact, kept watch over him. On the second day the man felt very unwell, and was only relieved by ganja being given to him.

32. Siddhi is drunk in Bengal on the Bijaya day, on which the goddess Durga's image is thrown in to the river. This seems to be a social custom. I have not met with any weighty religious authority in the matter. Siddhi is also offered to Bisweswar (the most sacred image of Siva) at Benares daily, and may be offered to Siva by his worshippers. Siddhi is drunk generally very moderately on the Bijaya day. Many people merely touch it, and some merely apply a drop to their lips. This custom does not seem to lead to the formation of the habit of drinking siddhi.

Bits of dry leaves of siddhi are taken by people starting on a journey, as being of good auspices.

33. Taking siddhi is not considered as objectionable as drinking wine. A Sanskrit verse says that "(in kali-yuga) siddhi (should be) preferred to wine." It runs thus:—*Samvidāsavāyārmadhaye samvidāiva garīyasī*. Ganja smokers are held in disrepute; sanyasis are, however, excused, and they often would beg a pice or two to enable them to smoke ganja. Charas smokers are detested.

34. It may be hard for confirmed smokers of ganja and charas to discontinue the practice all of a sudden.

35. In so far as these drugs are cheap and easily procurable ingredients for intoxication, it may be hard to prohibit altogether their use. Their prohibition is likely, among the lower classes, to lead to the use of alcoholic stimulants or other drugs. But I do not for a moment wish it to be understood that I support the use of ganja and charas. I believe the use of these drugs accounts for many cases of insanity and idiocy.

40. Yes, siddhi is often prescribed for men and horses. One of its effects is that it stimulates appetite. It has many other medicinal properties.

In prescribing siddhi other drugs are also prescribed along with it.

41. (a) Siddhi is believed to be such.

Ganja may temporarily serve to have a staying-power against exposure, etc.; but I believe it has very bad effects also upon the system. I have already given it as my opinion that sanyasis may have taken to the practice of smoking ganja as a preventive against the effects of cold, rain and privations. The Tantras require the Tautriks to have some sort of intoxicating drug or other.

44. Siddhi induces laughter and exhilaration. In large doses the consumer does not feel quite at ease and must go to sleep. In such cases the effect lasts for twenty-four to forty-eight hours. In small doses it induces hunger.

Ganja smokers are generally lean; but I have heard that those, who can take sufficient cooling and nourishing substances, preserve a good constitution. Whether ganja induces appetite or destroys it, I cannot say. In the long run ganja is very injurious to the human system.

45. I have known of cases in which ganja induced dysentery.

Yes, most certainly ganja has a most deleterious effect on the brain. I believe that many cases of insanity can be traced to its use. I know of one or two instances among juvenile smokers.

Further statement put in by MAHAMAHOPADHYA MAHESA CHANDRA NAYARATNA.

Since sending in my answers, I had opportunities of adding to my knowledge about hemp drugs. The additional information I have to give is given below:—

24. In Behar, the North-Western Provinces and Oudh, bhang is largely in use amongst members of the upper castes, Brahmans, Khatris and Vaishas; and amongst the priestly class, in particular in places of pilgrimage, such as Baidyanath, Gaya, Benares, Prayag, Mathura, Brindaban and Haridwar. Of up-country people residing in Calcutta and other places in Bengal, many take bhang.

27. Some take to siddhi or bhang as a medicine for bowel and nervous complaints; some take it as a brain tonic. There is a common saying *Siddhi khele buddhi bure, ganja khele lokhi chare*, which means "taking siddhi adds to the intellectual power, smoking ganja brings on poverty."

32. Siddhi is offered to the image of Siva at Benares named *jvara haresvar* (fever destroyer) in the belief that such offering has the effect of curing the person (on whose behalf the offering is made) of fever. Siddhi is likewise offered to other images of Siva at Benares and elsewhere, such as Baidyanath, Tarakeswar, etc. Ganja also is offered to some images of Siva, such as the image of Tarakeswar. In the Tantras I find there is a distinct religious sanction in regard to the use of siddhi. The Mahanirvan Tantra, the Bijaya Kalpa, the Rudrayamalokta Kalipuja Paddhati, enjoin that before commencing the worship of Devi, siddhi must be taken. The Tarabhakti Sudharnava exempts Brahmans from

this obligation to take siddhi as a preliminary to Devi worship, but declares it indispensable for Khatriyas, Vaishas and Sudras if spirituous drink is not available. The Prantoshini quotes a text which declares it a duty on the part of Brahmans, Khatriyas and Vaishas to offer siddhi to Devi. The use of siddhi under religious injunctions is almost always moderate, and is therefore not likely to be injurious.

34. Those who take siddhi for medicinal or religious purposes would feel it as a serious privation to have to forego its use.

35. Prohibition would cause discontent among consumers. Prohibition of the use of siddhi would cause widespread discontent.

Oral evidence.

Question 1.—All my service has been in the Education Department.

Question 35.—I think that alcohol is a greater evil than ganja.

Question 41.—I cannot say that most of the respectable class of Hindus in Bengal, but certainly many of them, are followers of the Tantrik religion.

Question 44.—When I speak here of the injury to the human system, I speak of taking the drug regularly twice or thrice a day, not once a day.

Question 45.—The deleterious effect on the brain and insanity are traced only to the excessive use of the drug.

I saw one boy, of from seven to nine years old, using the drug four or five times a day in association with smokers. He became insane. It was over eight or nine years ago. I saw him during the months he took ganja and became insane. I lost sight of him then. The doctor said his insanity was due to ganja. The boy was not a school-boy. I have never known any instance of school-boys smoking ganja. I have been Principal since 1870, and have an average of three hundred students under me.

94. *Evidence of BABU JADUB CHANDRA CHUCKERBUTTY, Brahmin, Civil and Sessions Judge, Kuch Behar.*

1. I have no personal experience. I instituted enquiries, and all my information is based on them.

2. These definitions may be accepted for the Kuch Behar State. Siddhi is locally known by the name of siddhi or bhang. Charas is known by its own name. Flat ganja is locally called chipti, and broken ganja chur. Round ganja is not sold here.

3. The hemp plant grows spontaneously in Kuch Behar and in the neighbouring districts of Raigpur, Dinajpur, Jalpaiguri, Dhubri, Goalpara, and in Pabna, Bogra, Rajshahi, and Mymensingh, etc.

4. The hemp plants are known here by the different names, ganjari, ganja, bhang and siddhi.

5. The wild hemp plant grows generally in a moist climate and sandy soil.

6. Dense.

7. No cultivation. They grow wild in abundance.

8, 9 and 10. No cultivation.

11 and 12. No.

13. The cultivation of the plant is prohibited in the Kuch Behar State.

14. No.

15. No; not to my knowledge anywhere in this State.

16. In this State, bhang is generally prepared by the up-country people in their houses from wild hemp plants growing anywhere. Ganja and charas cannot be, and are not, prepared from the wild plant.

17. Ganja and charas are not prepared in the State. The preparation of bhang from the wild plant is generally confined to the up-country people residing in the State. Other people also occasionally do it.

18. The drugs ganja, charas and bhang deteriorate in time. Ganja and bhang can be kept good for a year with ordinary care. Moist air and too dry air are the causes of deterioration. The deterioration can be prevented by keeping them from the action of these airs.

19. Ganja is used here for smoking. Charas is not used here.

20. About 6·5 per cent. of the male adult population in the State smoke ganja. It is generally used by the agricultural and labouring classes. It is not confined to any particular locality.

21. Flat and chur ganjas are preferred here.

22. No charas is used here.

23. Bhang is used for smoking, but rarely.

24. Bhang is used by the up-country men here. The proportion is about one in a thousand.

25. The use of ganja is on the decrease. It is owing to the increased duty.

26. I have no knowledge.

27. The ganja is used by people of active habits and of poor circumstances.

28. The average allowance for a habitual moderate consumer is $\frac{1}{8}$ th tola, and that for a habitual excessive consumer is about half a tola. The costs are respectively three pies and two annas.

29. Raw tobacco is used as an ingredient for ganja. Dhatura is not used. Tobacco is used to tone down the pungency of the smoke.

I know of no preparation, such as bhang massala.

30. Ganja is generally used in company. Bhang is generally used in solitude. Both are mainly confined to adult males.

31. In the case of bhang, the habit is easily formed. Not so in the case of ganja. Yes; it is not so easy to break off. Yes; there is a tendency for the moderate habit to develop into the excessive.

32. There is a custom of drinking bhang on the Bijaya, i.e., the day on which goddess Durga is consigned to waters. People also drink it on the day the Madan, Kamdeb (the god of love) is worshipped. But it is generally done temperately. There is no custom about the smoking of ganja.

33. The use of ganja and bhang is to some extent in disrepute here in the State. People under the influence of these drugs generally lose their

temper. No custom of worshipping hemp plant obtains here.

34. Yes; it would be a serious privation in case of ganja.

35. It will not be feasible, neither advisable. The drug will be consumed illicitly. It will cause serious discontent. It may not amount to a political danger in a place like Kuch Behar. Yes; the prohibition will be followed by recourse to alcoholic stimulants or other drugs.

36. There is reason to think that to a certain extent alcohol has been substituted for these drugs. This is due to a desire on the part of the people to imitate the Western nations. The proof is to be found in the decrease of the consumption of these drugs and an increase in the consumption of alcohol.

37. There is no difference in kind, but in degree.

38. No difference in kind or degree.

39. Smoking is less injurious. In smoking, the fire destroys some of the intoxicating matter.

40. Ganja and siddhi are prescribed by some schools of native doctors in the treatment of certain diseases, such as chronic dysentery, skin diseases, etc.

41. They are digestive and give staying-power in severe exertions or exposure, to alleviate fatigue; also as a febrifuge in malarious, damp, and unhealthy tracts. It is the moderate habitual use.

42. I do not know.

43. Yes.

44. It is refreshing and intoxicating. It stimulates hunger. The effect lasts for about three hours. There are no after-effects. Yes; want produces longing and uneasiness.

45. They do not impair the constitution if the consumers are well fed; otherwise ganja smoking impairs the constitution and produces dysentery. It does not generally impair the moral sense or induce laziness. In several cases ganja produces insanity. It produces insanity sometimes of harmless type. It is at first temporary; but if the habit is indulged in, it becomes permanent. The symptoms may be reinduced by use of the drug after liberation from restraint. Drinkers of siddhi or bhang generally talk too much to themselves and laugh. Yes; they generally confess. Mental anxiety and weakness of

the brain induce insanity when followed by use of the ganja. No instances occurred to me.

46. The excessive use leads to the effects referred to above.

47. I do not think it is hereditary.

48. The above reply will apply.

49. I do not know. It does not produce impotence.

50. I do not know.

51 and 52. (a) No.

(b) No connection.

53. No. I do not know of any such case.

54. No.

55. Yes; they do it occasionally. I do not know.

56. I cannot say. Confirmed smokers sometimes mix dhatura to induce sufficient intoxication.

57. Have no experience.

58. The present system is working well.

59. No improvement is suggested.

60. Ganja is not produced in the Kuch Behar State.

61. Charas is not produced here.

62. No; should not be controlled.

63. No.

64. I am for doing away with all restrictions.

65. Yes, reasonable; but it would be better if there were no taxes at all.

66. If there be any taxes at all, it is necessary that the rates should be different, inasmuch as they contain the intoxicating elements in different proportions.

67. No objection.

68. No. Such houses should not be opened.

69. The people here are consulted before any new shop is opened.

Yes, local public opinion ought to be considered.

70. There are no facts regarding the importation or smuggling of hemp drugs from Native States.

The duty is really paid. Wild bhang is not taxed here, nor is it sold in the bazar.

95. Evidence of BABU GIRINDRA MOHAN CHUCKERBUTTY, *Brahmin, Munsiff, Comilla (Tippera).*

1. Very little. I will therefore answer those questions only for which I am competent.

3. I thought it so; grows in Rajshahi, Bhagalpur, and Monghyr.

7. (a) Ganja. Naogaon sub-division, Rajshahi district.

(c) Bhang. Bhagalpur and Monghyr.

13. Naogaon (Rajshahi).

14. (a) Ganja.

Naogaon sub-division, Rajshahi.

20. Poor labouring classes, especially the Banias (aborigines settled in the Lower Provinces).

27. Those who are accustomed to hard manual labour.

31. (a) Easily formed.

(b) Difficult to break off.

(c) Not necessarily.

32. At Durga Puja time or Bijaya Dashami day, as a religious custom in many Bengal districts, bhang is drunk in small quantities. Thereby no habit is formed. It is regarded as an essential custom in those districts.

33. The consumption of ganja and charas is regarded as a very bad habit, except in the case of religious mendicants. The reason for the disrepute is the bad after-effects thereof.

34. Yes, in many cases.

35. (a) No.

(b) Yes.

(f) Yes, (a) in many cases.

43. Not always.

51. Habitual poor ganja smokers are in many cases found addicted to theft from sheer necessity.

53. It does sometimes.

58. So far as I know, I think the system is working well in Bengal.

96. *Evidence of* BABU SREENATH CHATTERJEE, *Brahmin, Cashier, Public Works Department, Darjeeling Division.*

1. Occasional association with sadhus and chelas (Neophytes), of different sects of Hindu religion, who generally use either ganja, bhang or charas, and my personal knowledge of the district, for a long period.

2. By the names of ganja, bhang, siddhi and charas.

3. District Darjeeling in the lower portions of the Rungit and the Teesta Valleys. They are wild hemp.

4. Generally known by bhang.

5. The elevation of the valleys above referred to is between 500 and 1,200 feet above sea-level.

Soil—sandy and loose earth. The plant grows in the rainy season.

6. Somewhere dense and somewhere scattered.

7. No; I mean in this district.

18. Yes; if kept in damp places.

19. Generally used for smoking.

20. Specially in the Tarai the agricultural class, such as Rajbangshis, smoke ganja, but charas is rarely used in the district.

21. Flat ganja is generally preferred.

22. Foreign. I mean Nepalese, if ever used by any.

23. I do not know.

25. On the decrease. There is no ganja smoker in my native village now, whereas there were many in my younger days.

28. The cost of ganja per diem to a habitual moderate consumer is one anna, and to habitual excessive consumers annas three.

29. Yes; bhang massala is composed of bhang, seeds of cucumber, black pepper, and coriander seeds.

30. In solitude comparatively less according to the habits of the consumers, while in company more, because the habits are generally as a matter of course overruled. Yes; it is confined to the male sex. It is not at all usual for children to consume any except in rare cases, in the unhealthy parts of Bengal.

31. Yes; the habit of consuming any of these drugs is easily formed, but it is not at all very difficult to break off for a moderate consumer, whereas it is not the case with those who resort regularly to the ganja dens or *addas*.

32. It is to be considered as religious in regard to the consumption of ganja, inasmuch as every consumer will have to invoke the spirit of Siva, one of the Hindu Triad, by offering every chillum of ganja before the smokers partake. Bhang is used in Bengal in the holy Bijaya days of Durga, Kali, and Jagathdbatri Pujas, further, on the sacred day of Sivachaturdasi, commonly called Sivaratri, both ganja and bhang are universally used throughout the length and breadth of India by offering both the drugs to Siva, whether the devotee is in the habit of using them or not.

33. The consumption of each of these drugs is generally disregarded in the social point of view, but it is not so in the religious point of view.

34. Certainly. A serious privation to all classes of consumers. The reason is that a habitual

consumer can pass a day without taking any food whatever, but it is quite impossible for him to do so without his usual smokes, as the habit is a second nature.

35. (a) No; as far as I understand.

(b) Very possible.

(c) The prohibition, if necessary, (though I do not advocate it), can be enforced by legislation.

(d) and (e). Yes. Serious discontent among the consumers, and calamity to the country not amounting to a political danger. No political danger can be apprehended if the sepoys of the Native regiments, who are generally addicted to the smoking of ganja and drinking of bhang, are not discontent.

(f) The orthodox class of consumers will never have recourse to alcoholic stimulants.

36. Yes; to a certain extent. The cause I attribute is the spread of English education, civilisation, and spirituous liquor shops throughout the length and breadth of the country.

40. Yes; bhang is prescribed by Hindu physicians for its medicinal qualities. I do not know whether any of these drugs is used in the treatment of cattle-disease.

41. Yes; accessory and digestive too. Gives staying-power under severe exertion and exposure, and alleviates fatigue. Yes; it (ganja) is preventive of disease in malarious and unhealthy tracts of Bengal.

Moderate occasional use of the drugs is beneficial.

42. Yes; beneficial, as well as harmless. I have never seen a moderate consumer of any of these drugs harmful.

43. Yes; the moderate consumers are undoubtedly inoffensive to their neighbours in comparison with the moderate drinkers of alcohol in an Indian climate.

44. It is refreshing, produces intoxication, but not like the intoxication of alcohol, and creates appetite. No after-effects.

45. No.

46. The habitual excessive use of any of these drugs produces more or less noxious effects, physical, mental and moral; impairs the constitution; injures digestion; causes dysentery, bronchitis and asthma too; impairs moral sense, and deadens intellect. Habitual excessive use of ganja produces insanity.

47 and 48. No.

49. Yes; it is used by some prostitutes. It produces impotence in the long run.

50. Produces the same injurious effects in a shorter time.

51. No. No connection.

52. Yes.

53. Yes. I know of no case in which excessive use has led to temporary homicidal frenzy.

54. Yes; only ganja is used by criminals to fortify themselves to commit premeditated act of violence.

55. Yes; the complete stupefaction can be made by this drug (ganja) in case of those who are not accustomed at all to the drug.

56. The admixture of dhatura is used occasionally for personal consumption and for administration to others.

A Brahmin leper of my native village used dhatura for personal consumption.

57. I do not know.

66. In my own opinion I prefer different rates of taxation for different kinds of ganja, according to the qualities.

97. *Evidence of BABU HARA GOPAL DUTTA, Kayasth, Retired Excise Daroga, Mymensingh.*

1. I have served in the Excise Department for about thirty-two years. The whole period of my service has been spent within Mymensingh district.

2. Ganja and bhang are not produced from the same plant. Seeds are seen in all the varieties of ganja sold in this district. With the exceptions noted above, the definitions may be accepted.

3. Bhang grows spontaneously in Mymensingh district. It grows in abundance here.

4. Bhang.

5. I cannot answer.

6. Scattered.

7. (a) At Rajshahi, but to what extent I am not aware.

(b), (c) and (d) *Nil*.

8. I am not aware of any increase or decrease.

9 to 12. No information.

13. The cultivation of hemp plant for ganja is restricted to the Rajshahi district. The district was selected as its soil was specially adapted for the growth of ganja. Dry and elevated soil is necessary for the growth of the plant. I am not aware what climatic conditions are required. Ganja loses much of its intoxicating properties if there be any shower in Pous and Magh, *i.e.*, just before reaping the crop. I am not aware if the cultivation of ganja would be impossible in any district.

14. (a) and (b) In Rajshahi district; but I am not aware to what extent it is prepared there.

(c) Wild bhang is gathered to a small extent in this district.

15. The ganja plants are cut. They are then trodden under foot or rolled, as the case may be. The small branches are then made into bundles. I am not aware how ganja is prepared from the wild plant. The resinous matter of ganja adheres to the feet of the labourers when they tread on ganja. This resinous matter is collected and forms charas.

The wild bhang plants are cut and their leaves gathered. They are then dried in the sun. There are no different preparations of these drugs for smoking, eating and drinking.

16. Bhang is prepared by the people in their own houses. It can be prepared from the hemp plant wherever grown. I do not know if ganja and charas can be prepared in the same way.

17. No information.

18. Ganja and bhang both deteriorate in their intoxicating properties by keeping. I am not aware if they quite lose their effect with time. Ganja keeps good for a year and a half and bhang for a year. The resinous matter in the drugs gradually dries up. This is the cause of deterioration. If the drugs be kept in air-tight boxes and exposed to the sun occasionally, the deterioration may to a great extent be prevented.

19. Ganja is generally smoked; but when an excessive consumer is very much eager for taking the drug, and cannot afford to wait till the necessary preparations for smoking are made, he sometimes eats ganja, and when his craving is thus to a certain extent satisfied, he proceeds to make the preparations for smoking.

I have no experience about charas.

20. Cannot answer.

21. Flat ganja is preferred in this district. In Calcutta and Jessore round ganja is preferred.

22. Charas is not used in this district.

23. The tops of bhang plants are sometimes smoked when ganja cannot be obtained. No particular localities can be mentioned where this practice is in vogue. It is so used by the poorer classes of consumers, who may not have the means to purchase ganja at the time.

24. Cannot answer.

25. The total quantity of ganja consumed is on the decrease, but the number of consumers is on the increase. The increase in the duty of ganja is the principal cause of the decrease in consumption. The number of consumers has increased with the increase in population.

26. (a) One anna or one-sixteenth of a tola; its price varies from 3 to 4½ pice.

(b) half a tola; its price varies from 2½ to 3 annas.

29. (a) A leaf of tobacco is ordinarily mixed with ganja. It destroys the bad smell of ganja. (b) Dhatura is mixed with ganja occasionally by excessive consumers to increase the intoxicating properties.

(a) Bhang is ordinarily drunk with black pepper. (b) Other spices are also occasionally mixed with it.

30. Ganja and bhang are generally taken in solitude and rarely in company. Ganja is taken by both sexes; but I have not seen any female take bhang. Ganja and bhang are generally taken by adults and old men. It is not usual for children to take ganja or bhang.

31. The habit of consuming ganja and bhang is easily formed. It is difficult to break off the habit when once formed. There is a tendency for the moderate habit to develop into the excessive.

32. Ganja is required for Troilokya Nath's mela and Tinlok's sinni. A number of ganja consumers are assembled on such occasions and a prescribed story is repeated and ganja is consumed. Sweets are also taken. The use of ganja on these occasions is compulsory. The consumption on such occasions is generally excessive, and may lead to the formation of the habit.

33. The consumption of ganja is generally regarded with contempt. The public opinion is unfavourable to the consumption of the drug. It makes people irritable and hot-tempered. This is the reason why people look down upon the

consumption of the drug. I am not aware of any custom of worshipping the drug.

34. It would be a serious privation to those classes who live by manual labour. They would not be able to work as hard as they are now able if they be not allowed to indulge in the drug. I can give no idea as to the probable numbers of each class.

35. It would not be feasible to prohibit the use of ganja and bhang. Many of the ganja consumers would be attacked with various sorts of diseases. Bhang is in many cases used for its medicinal properties, so the use of the drugs cannot be prohibited. If the use of the drug is prohibited there would be illicit consumption. It would be impossible to enforce the prohibition. The prohibition would occasion serious discontent among the consumers, but such discontent will not amount to a political danger. The prohibition would not be followed by recourse to any other drugs.

36. No.

37. I have no experience about charas.

38. Flat ganja produces a greater amount of intoxication than either round or chur.

39. Eating ganja is less injurious than smoking. The heat of the smoke gives the body a more dried and parched appearance.

40. Ganja and bhang are both so prescribed.

41. Ganja is beneficial—

(a) As food accessory.

(b) To give staying-power under severe exertion.

(c) and (d) *Nil*.

Bhang is beneficial—

(a) As a digestive.

(b) To give staying-power under severe exertion and to alleviate fatigue.

(c) *Nil*.

(d) As nourishing the body.

42. The moderate use of ganja produces cough and dysentery.

The moderate use of bhang is harmless. Bhang must be drunk in order to be beneficial.

43. Inoffensive.

44. The immediate effect of smoking ganja is refreshing. It produces intoxication to a very slight extent. It creates appetite. The effect lasts for about an hour. There are no after-effects. The want of subsequent gratification does not produce any uneasiness.

The immediate effect of smoking bhang is of the same nature as of smoking ganja.

There is no immediate effect by drinking bhang. The effect is produced about half an hour afterwards. It is refreshing and produces a slight intoxication, and creates appetite. The effect lasts for about three to four hours. The want of subsequent gratification does not create any uneasiness.

45 and 46. The habitual moderate use of ganja

impairs the constitution and gives the body a dried-up appearance. It produces cough and dysentery. I am not aware if it injures the digestion or causes loss of appetite. It makes a man irritable and hot-tempered and induces habits of immorality but does not produce laziness. It deadens the intellect, but does not produce insanity.

47 and 48. Not generally hereditary; but there are cases in which both the father and the son use the drug.

49 and 50. I am not aware if ganja or bhang is used as an aphrodisiac.

51 and 52. Only a small proportion of bad characters are habitual moderate consumers. There is no connection of use of ganja and bhang with crime.

53. No, none.

54. No.

55. I am not aware of any such cases. Complete stupefaction can be induced by both ganja and bhang.

56. Dhatura is occasionally mixed with ganja for personal consumption in order to increase its intoxicating properties. I am not aware of the effects of the admixture of any other substance with bhang.

57. I am not aware of the effects of eating or drinking bhang.

60. The cultivation of ganja-bearing plant is sufficiently controlled; no modification is necessary.

61. I have no experience about charas.

62. The present restrictions on the cultivation of the bhang plant are sufficient.

63. No objection.

64. It seems to me unjust to levy any duty on the deficiency in transit when the seals of the bags are intact and the deficit is due to natural causes. Nor should the excess in weight, due to natural causes, be brought into account. Nor should any duty be levied on the deficiency in excess of 2½ per cent., as found at the time of annual stock-taking. Ganja should be exported in wooden boxes with tin covering to avoid tampering in transit.

65. The taxation of bhang is reasonable with reference to ganja, and the taxation of ganja and bhang is also reasonable with reference to country liquor.

66. There should be different rates of taxation, as they contain different proportions of branches in them. The branches have to be rejected at the time of sale.

67. No objection.

68. Ganja is smoked in the licensed shops. A great deal of noise is made by the consumers. In my opinion consumption should not be allowed in the licensed shops.

69. I am not aware if the wishes of the people are consulted. I think public opinion should be consulted.

70. I am not aware of any such smuggling. Much of the bhang consumed is not duty-paid.

98. Evidence of BABU PRATAPACHANDRA GHOSHA, Registrar of Calcutta.

1. My information is chiefly derived from books, pamphlets and periodicals, and from occasional observation of facts and circumstances which presented themselves to me during my official tours through several districts of Bengal proper as

well as during my private journeys. I never sought information, and therefore I have no personal experience in the matter as to the use, abuse, cultivation, or manufacture of the drug.

2. These definitions may be accepted for Bengal.

As to the names of bhang, I may add the following:—

- (a) *Thundai*.—This term is used in Mirzapur and Benares districts, as the beverage is believed to have a cooling effect in hot days of summer.
- (b) *Sukha*.—This name is in vogue in the Punjab, and much used by the Sikhs. Adigrantha, the sacred book of the Sikhs, tolerates the use of bhang in moderate doses. (Rati aphim masa sukha, *i.e.*, of opium one rati in weight, or of bhang one masa in weight.) The term sukha literally means dry or desiccated, tobacco being a forbidden article with the Sikhs. In the Gangetic India, however, the term sukha means tobacco leaf, or rather that form of it which is chewed with a little quick-lime; the alkali by developing the nascent ammonia in the leaf increases its pungency, which not unoften is mistaken for the strength of the leaf.

Ganja—

- (a) *Tamaku*.—The name of the drug by which those who are initiated in its smoking call it. Has it anything to do with the small quantity of tobacco which is not unoften added to it?
- (b) *Tvaritananda*.—A compound name, meaning, that which gladdens immediately (it is smoked).

3. *Cannabis indica*, lately reduced to *Cannabis sativa*, is a variety of the *sativa*. The former I have seen to grow spontaneously almost everywhere I have visited. It grows spontaneously in Jessore, Nadia, 24-Parganas, Hughli, Midnapur, Birbhum, Bankura, Manbhum, Chota Nagpur, Rangpur, Dinajpur, Malda, Mymensing, Jalpaiguri, Tippera, Noakhali, Chittagong, Bhutan Doars, Patna, Gaya, Benares, Mirzapur, Rawal Pindi, Peshawar, Murree, and Kashmir. Abundantly in Jessore, Nadia, 24-Parganas, Jalpaiguri, and Kashmir.

4. Ganja gach and siddhi gach. They refer to the different sexes of the same plant, or rather to the so-called different sexes.

5. I have noticed it at about 5,000 feet above the sea level. It prefers a shady place, and is seen to have a liking for rubbish heaps in Bengal. It prefers a well-drained place, and is impatient of water-clogging. A light soil and a cool place are suited to it. The product, ganja, is better grown in Bengal; the leaf, siddhi, in the North-West Provinces, perhaps to the west of Delhi; and the resin, charas, in Nepal, Kashmir, and the Hills, a cooler climate and an elevated place developing the same.

6. I have noticed it dense in wild growths. Isolated plants are rare.

15. My information is mostly from fakirs and religious mendicants.

(b) Wild plant.

Ganja—

(A) Smoking.

To prevent flowering spikes from being fructified by pollens from male plants which grow promiscuously with the female, they are, while on the plant, lightly rolled between the palms, and the resin, or rather the resinous pollen or dust of the flowers, agglutinate the petals and the little bracts or leaflets which sprout between the blossoms. The treatment, repeated several times, converts the spikes into what is commonly called jata, which gives the matted appearance to the article.

Siddhi—

(C) Drinking.

The leaves are prepared by nipping the flowering buds as soon as they appear. This, they say, is the way to concentrate the narcotic principles in the leaves. By analogy, this process is known as *khasi*, *i.e.*, castration.

16. Bhang, *i.e.*, bhang leaf, is never prepared by people in their houses, for every hemp plant does not yield good bhang. The fresh leaves specially have a subji (greenish) *i.e.*, unripe, smell about it, which is considered a defect of good bhang, and it is said to have a *garbi* in it, a heating principle, producing headache and nausea.

It can be prepared from the wild plant wherever grown; but bhang from Upper India fetches a higher price, and is preferred to bhang from Bengal or Behar grown plants. I think charas prepared from plants grown in the plains must be of an inferior quality.

18. I am told bhang improves by keeping. Ganja and charas deteriorate in time. The resins in both these becoming drier, lose their narcotic potency. Moisture deteriorates all three.

19. Ganja is generally found in small quantities mixed with bhang, and, unless the drinker of the leaf carefully eliminates the seeds or berries occurring in bhang, he involuntarily drinks the same. Picked bhang is not, however, so much relished by those who drink it for more than ordinary intoxicating purpose. Ganja seeds have been seen to be ground with certain other drugs to paint the bottom of earthen jars set up for the collection of fermented toddy, the addition of the seeds being made to increase the intoxicating power of the drink. I have noticed this addition to toddy in the district of the 24-Parganas.

20. *Ganja*.—All mendicants, ascetics, fakirs, etc., bearers, coolies, peshrajes, boatmen, and such other persons as have arduous labour to go through, or as are exposed to the inclemencies of the weather; cultivators in Bengal are not free from this drug-smoking. Illiterate up-countrymen, darwans, shop-keepers, and gomashas are not free from this narcotic. In Bengal, especially in the mufassal, I have noticed in all classes of society. As to proportion I have no idea.

Charas.—All those mentioned above have been seen to enjoy this luxury also. In Calcutta, however, within the last few years, the use of this resin is losing ground amongst the Babus who are seen to take to spirituous liquors.

22. Charas from Nepal and Kashmir are preferred. Gorakhpuri charas is said to have the flavour, or rather the fragrance, of green mango, and the momia, *i.e.*, waxy charas, is much prized. I am informed, in Lucknow a fluid extract of charas is much sought for. Is it the same which is prepared in Kashmir by boiling the entire hemp plant, leaves, flowers, sticks and all?

23. I am not aware of it.

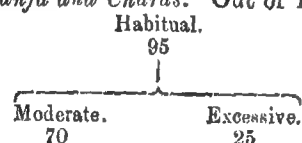
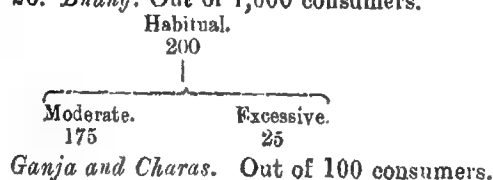
24. Bhang is drunk universally. It is occasionally chewed when a pestle and a mortar are not available for grinding. But this latter practice is observed only in the muscular people of the North-West Provinces. A prepared form, the leaves or rather a thick decoction of the leaves, is confected with sugar and milk, to which khoa, *i.e.*, desiccated milk, is added, the whole thing cast in shallow dishes and cut lozenge-shaped. This is majum. It is also eaten in kachuri, a kind of patty filled with ground bhang leaves and several other condiments. It is made into an electuary, and the preparation is called shakrasana, a carminative and slightly intoxicating electuary.

25. If by the increase of the use of the drugs is meant an increase of their consumption, I think I may safely say that the use of these drugs is on the increase. The drugs are resorted to by two sets of people. With one it is an adjunct to pleasure, and with the other it is a stimulating necessary, which increases staying-power under severe exertion and exposure, which the nature of his vocation demands. Those who resort to those articles simply for pleasure may change their taste and take to alcoholic drinks. But the cheapness of the products of *Cannabis indica* is an inducement which people of the other class cannot withstand. No other stimulant is quite so cheap, and therefore so accessible, to those of limited means than ganja and its congeners; besides, ganja is so immediate in its effects. With the development of

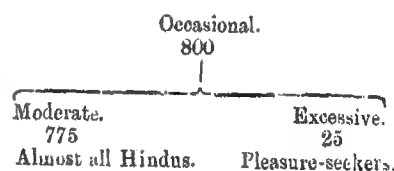
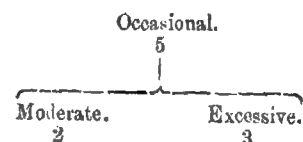
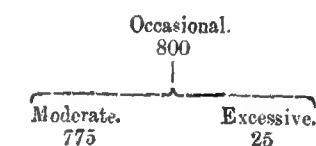
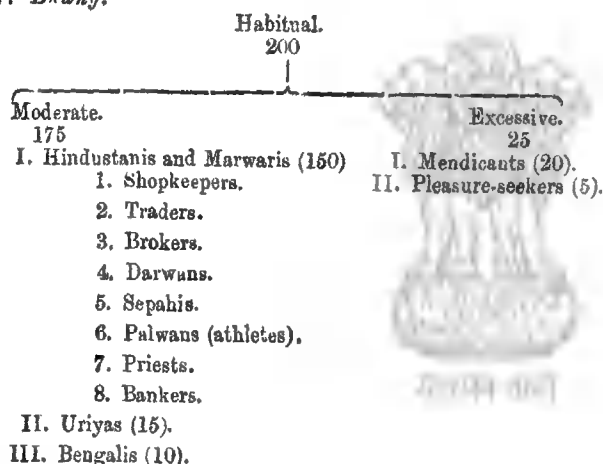
trade and increase of the earnings of the labourer the use is increasing, for the number of labourers is increasing with the increase of trade. I have already stated that with certain classes ganja and its congeners are articles more of necessity than of luxury. Add to this the religious scruples against the use of alcoholic drinks, which go a great way. A mendicant who does not belong to the Aghori sect or to the Tantrik liturgy would not touch wine, and with him, therefore, the only cheap intoxicating principle is ganja.

Charas is more expensive than ganja, and therefore is not quite so commonly used. Bhang is the cheapest of all, and, being mixed with some other condiments, is fancied to be a cooling draught, and has not therefore that ignominy attached to it which ganja and charas have.

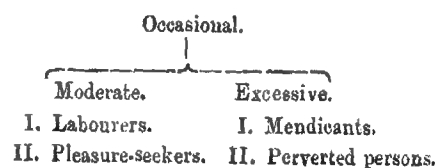
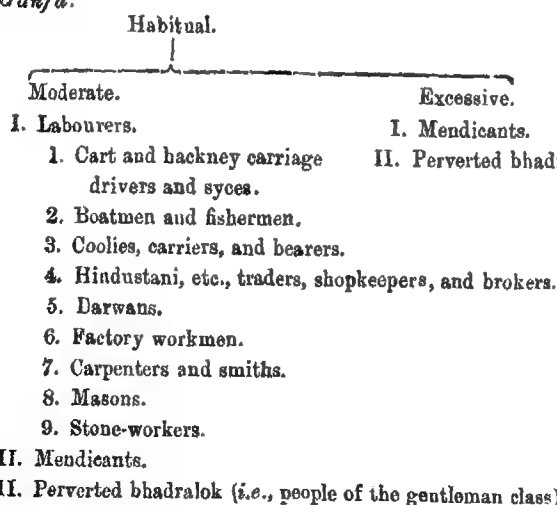
26. *Bhang*. Out of 1,000 consumers.



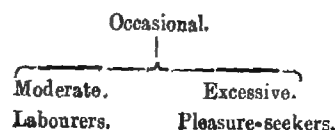
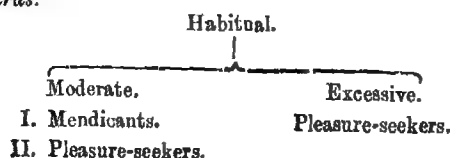
27. *Bhang*.



Ganja.



Charas.



29. Ordinarily black pepper and anise-seed are used in the preparation of bhang for drinking purposes. Those who can afford add kasni seeds and lesser cardamoms. Dhaturá seeds are added by those who require exceptionally strong potation; the ordinary ingredients mentioned above are mixed, some for giving a flavour to the drink, and the black pepper to give a taste.

I do not know of any preparation known as bhang massálá, but I do know of a collection of certain ingredients sold in the bazar as bhang massálá. They generally consists of:—

- (1) Golmarich (black pepper); (2) sounf (anise-seed); (3) kasni seeds; (4) Khirá (cucumber) seeds; (5) kharbujá (musk-melon) seeds; (6) guláb (dried rose-buds); (7) eláchi (lesser cardamoms); (8) labanga (cloves).

Nos. 2, 3, and 4 are supposed to have a cooling effect; Nos. 1, 6, 7, and 8 flavour the drink. To these some add loaf-sugar and milk. It is believed that sugar, whether taken with bhang or after bhang, deepens the intoxication. While on this subject I may add that the expressed juice of the following leaves is supposed to counteract the evil effects of bhang and some other narcotics: (1) leaves of the jack fruit tree (*Artocarpus integrifolia*); (2) kalmi (*Ipomœa aquatica*); (3) tamarind leaves.

30. Habitual moderate consumers generally do not seek company, for with them the drug is a matter of necessity and every-day occurrence. It is the pleasure-seekers only who long for society. The consumption is mainly confined to the male sex. Children of the habitual moderate consumers are generally initiated by their parents.

31. The habit of consuming bhang is easily formed. It cannot be easily broken off. The habit of consuming ganja is not easily formed, and it is more difficult to discontinue the use of ganja than to discontinue the use of bhang. Charas and ganja are interchangeable, but in some society the latter has a disrepute.

32. The custom of drinking or tasting bhang on the last day of the Durga Puja festival has a quasi-religious importance. This custom is regarded as essential, and, although taken in moderate doses, it affects the drinkers variously. It is only in the case of the perverted that it is likely to lead to a habit. Ganja is considered equally essential on the Sivarátri night; but the proportion is so small in the gentleman class, that no further observation is necessary.

33. Ganja and charas are held in disrepute. Bhang, however, is more pardonable than the above two.

34. Certainly. The want of bhang and ganja will have serious effect upon the consumers. The occasional moderate consumers of bhang, such as those who use it as an observance, will consider any attempt to prevent the use of the same as an interference with their religious custom. How far the use of the bhang is recommended in the religious books of the Hindus is a question for the priestly pundits to discuss. But the custom, whether sanctioned by the books or not has acquired a sanctity which no amount of liturgical sophistry can remove. With certain restrictions, this may be said also of ganja. As to charas, I do not think that in this part of India the foregoing of it would be considered a serious privation.

35. It would be, I think, feasible to prohibit the use of charas, which is either imported from

the frontier countries or manufactured in particular localities. Prohibitory duties, and such other excise rules as may be used against smuggling, may, in several years, by enhancing the price of the article and making it scarce in the market be abolished altogether. As to bhang and ganja, the plant itself being found wild throughout India, I am afraid it would not at all be feasible to forbid its use. Prohibitory duties and stringent excise rules may make the article difficult to obtain, but I believe illicit means will not be altogether stopped. In such out of the way stations as Baxa Doars and British Bhutan, I have myself seen Lepcha women professing to sell butter and ripe banana fruit offering to the basti people smuggled spirits, which they carry about their person under their flowing garments in bamboo pipes. And therefore I am inclined to believe that if with such strict surveillance spirit smuggling in the frontier districts has not been stopped, the use of the dried leaves and of the flowering spikes of a plant growing wild all over India would not be materially forbidden. It is true that every bhang plant does not produce good marketable ganja, but in times of scarcity the deficiency of the narcotic principle in the ganja will not be unfrequently compensated by the addition of other more injurious narcotic drugs than good ganja. I mean dhatura seeds and such other ingredients. I have heard that those who are addicted to the use of opium just to satisfy their craving when in straitened circumstances not unoften scrape the poisonous oily extract of tobacco which accumulates underneath the chillum and at the ends of huká pipes. It would not therefore be at all a wise policy to interdict the use of a drug which is so general, and which in moderate quantities is not quite so injurious. While on this subject, I may mention that I have seen viciously disposed taxidermists of the Museum of the Asiatic Society of Bengal take to stealthily drinking alcohol in which specimens were immersed, and the vice became so general that Dr. John Anderson, the then Curator of the Asiatic Society, substituted methylated spirits for the purpose. Perverted gentlemen again have been seen when all spirit drinks have been placed beyond their reach to swallow eau-de-cologne for the spirit it contains. From all that I have seen of my countrymen, I am convinced that no amount of excise surveillance would prevent this vice, this craving after intoxicating drink or drug. A thorough moral education may reduce the number of consumers, but to prevent it altogether is beyond all human means. And of the two things, *Cannabis indica* and spirits of wine, I am of the opinion the former is less objectionable for more reasons than one.

The authorities need not dream of any political danger in the Gangetic province of Bengal. Here there is neither unity in strength nor strength in individual. We may howl, long howls which may be heard from Alaska's shore, but we can never bite. The people of this part of the country, nevertheless, are more to be dreaded for the mischievous interpretations which it is their nature to give to all wholesome moves. The case is different in other parts of India proper. The mere prohibition of any particular drug may not by itself bring any serious consequences, but there is no doubt that this will foment special discontent amongst a class who have nothing to lose in riot and anarchy.

36. I have already stated that people of the bhadralok class, or those who have got the means or can afford it, are gradually dropping the drug for the sake of the alcoholic drink, not because

that they have been discriminating between the effects of the two, but because of the two the alcoholic drink is fashionable, and has a kind of *éclat* attached to it which the indigenous drug has not. The tinkling of glass, the sparkling of liquor, and the dish of fruits displayed on a table with ice and sodawater has not only a European look about it, but is quite so decent, so neat, and so nice. Compare the above scene with a couple of lotas, a thick stick and a sandstone bowl, the paraphernalia of a bhang-drinker; or if the consumer has a luxurious inclination, his luxury culminates in the addition to the drug of a handful of sugar and a cupful of milk, the total cost of all which never exceeds the value of a bumper toast. Of the ganja-smoker, his greatest luxury consists in soaking the ganja for about an hour or so in a little rose-water. The chillum, the little earthen funnel-shaped utensil, remains all the same, a millionaire draws his puff of blue smoke or a faqir finishes his pull by a flash from the chillum.

The second cause of this alcoholic substitute is the greater accessibility of the article. Retail shops of alcoholic liquors have been opened almost in every quarter, and the article has been brought temptingly to the door of the buyer.

40. Yes. Bhang enters into the preparation of several native medicines, and is frequently used in

veterinary treatment. Ganja-smoking is prescribed in asthmatic complaints.

41. (a) Bhang is frequently used in small doses as a food accessory and digestive, and it has been seen to cure certain dyspeptic and diarrhoeic complaints.

(b) Ganja is generally used for this purpose.

(c) Ganja has been seen to be used as a protection against exposure to rain and night dews.

Bhang has been seen to alleviate fatigue when taken on the last day of the Durga Puja.

I refer to moderate occasional use when the conveniences are occasional, and to moderate habitual use when the exposure and fatigue are constant.

43. Yes; they are.

47. No.

54. I have heard that criminals fortify themselves by smoking ganja before committing an act of violence.

55. I have heard two or three such cases of murder accompanied with stupefaction by bhang and dhatura seeds, and I think these cases were tried in the High Court within the last five years.

99. Evidence of RAI KAMALAPATI GHOSAL BAHADUR, *Brahmin, Pensioner, Sub-Registrar and Zamindar, 24-Parganas.*

1. I was a police officer and served both in the old and new police for more than thirty years in the districts of Backergunge and 24-Parganas and had to deal with the detection of excise cases occasionally.

2. By the names of siddhi or bhang, charas and ganja.

3. In both the districts of Backergunge and 24-Parganas of which I have knowledge, the hemp plant grows spontaneously to a very small extent. In neither of these districts it is abundant.

4. Known by the names of siddhir gachh and ganjar gachh. There is some difference between the two plants and the one can easily be distinguished from the other.

5. The growth is dense or scattered according to the quantity of seeds that happen to fall on the ground by some chance or other.

7. There is no cultivation of the hemp plant in either of the two districts of Backergunge and 24-Parganas of which I have knowledge.

14. Formerly bhang was prepared by collecting the leaves of the spontaneous or wild hemp plants at Tushkhali and other places in the district of Backergunge but the practice, I think, has been done away with since, for fear of detection.

16. Yes, bhang is prepared generally by the people in their houses. It can be prepared from the wild hemp plants wherever grown. Ganja can seldom be prepared from the wild plant.

17. Bhang is prepared to a very small extent by almost all the classes of people for the purpose of drinking when needed, if available.

19. Ganja and charas are used for smoking purposes only in this part of the country.

20. About one-fourth of the lower class of labouring men consisting chiefly of Bagdis, Karas,

Chandals, coolies, &c., smoke ganja. Other castes such as Pods, Musalmans, Kaibartas, as well as Brahmans, Baidyas and Kayasths do not, as a rule, smoke the ganja to a larger extent; but about one-sixteenth, and in some places less than that, the people smoke ganja in both the above districts. Charas is seldom used in these parts and it is used only by the upper classes chiefly.

21. When I was in the district of Backergunge, more than eleven years ago, I saw there the flat ganja in use. In the district of 24-Parganas, as far as I know, round ganja and chur ganja are generally used, specially in this part of the country.

23. No, as far as I know.

24. In both the districts mentioned above only a small portion of the people drink bhang occasionally.

25. It is supposed that the use of ganja only in these parts is increasing.

The reason assigned is that the labouring class of men find it as a kind of relief after hard work. Besides the habitual smokers have a desire to increase their number and therefore induce others to smoke.

26. Amongst those that smoke ganja—

(a) About ten-sixteenths are moderate consumers.

(b) Two-sixteenths habitual excessive consumers.

(c) Two-sixteenths occasional moderate consumers.

(d) Two-sixteenths occasional excessive consumers.

As has been ascertained by enquiry from the licensed vendors of this part of the country.

27. As stated above, most of the ganja smokers are of the lower labouring class of men. They

labour on land as well as in water and find relief after such work.

28. As stated by the vendors, the average cost in the case of a habitual moderate consumer is one or two pice a day, and in the case of a habitual excessive consumer about four pice with regard to the ganja drug only.

29. By almost all the classes tobacco or *dokta* is mixed with the ganja to make it more agreeable.

Tobacco or *gurak tamak* is mixed with charas for the same.

In preparing majum, a kind of sweetmeat, consisting of milk, sugar and siddhi or bhang, a little dhatura or dhuntara is sometimes mixed to make it strong.

30. All these drugs are sometimes used in company and sometimes in solitude, according to the circumstance; the greater number in company. It is generally confined to the male sex and seldom to the female sex. There is no limit of age. Rare cases are seen amongst children to use any of these drugs.

31. The habit of consuming each of these drugs is easily formed. No doubt it is somewhat difficult to break off when a man once gets into the habit of using any of these drugs, but it is not so difficult as in the case of opium. There is some tendency in case of each of these drugs for the moderate habit to develop into the excessive but not as a rule.

32. It is the custom amongst the Sanyasis or votaries of Siva to smoke the ganja and sometimes to drink the siddhi. It is considered to be essential. It is generally excessive. It forms a habit, but not so injurious in their cases.

33. The use of ganja is regarded as a bad habit by the public, because its effects are sometimes injurious.

34. It would be no doubt a privation, though not very serious, to the consumers amongst the lower labouring class of men to forego the consumption of the ganja they use, because they require it after hard labour for relief. Their number, however, is not very great.

35. I do not think that it would be feasible to prohibit the use of all these drugs, specially ganja.

If prohibited, the consumers will try, if possible, to consume illicitly. I do not know in what way it could be enforced. The prohibition no doubt would occasion serious discontent among the consumers. I do not think that such discontent would amount to a political danger. The prohibition no doubt would be followed by recourse to alcoholic stimulants or other drugs.

37. The difference between the effects of charas

smoking and that of smoking ganja, is said to be this—that the smoking of charas is considered to be somewhat mild in its effects, but it is not so in the case of ganja, the effects of which are felt to be stronger by the consumer.

40. Siddhi or bhang is prescribed on account of its medicinal qualities by native physicians or kabirajes, and it is mixed with some of the important medicines in cases of diarrhoea, etc.

41. As far as I know siddhi or bhang has some digestive quality, and a moderate occasional use of it does good to those who suffer from bowel complaints and some moderate consumers take it on occasion of festivals, &c., for the sake of pleasure and for taking more quantity of food than usual. This practice is followed more by some of the young men of the upper class chiefly, and not by men of advanced ages unless they be habitual moderate consumers of the siddhi drug or suffering from some bowel complaints. The number of these men is not very great.

43. Moderate consumers are not offensive to their neighbours.

44. As far as I have been able to ascertain, the immediate effect of the moderate use of ganja, siddhi and charas, is refreshing to the habitual consumers. It produces intoxication but not in all cases. It creates appetite. The effects last long or short according to constitution and duration of habit. The want of subsequent gratification in every case produces longing or uneasiness when the time is over.

45. The use of ganja produces in some cases noxious effects both physical and mental. Except in the cases of hard labourers ganja impairs the constitution to a certain extent. The use of any of these drugs produces a kind of laziness in respect of the higher class only. Though the moderate use of ganja does not produce insanity yet it begets an irritative habit in certain cases.

46. The use of ganja when carried into excess sometimes produces insanity. In that case it is generally permanent.

47. It does not appear so.

51. Many of the bad characters are habitual moderate consumers of ganja.

54. Dakaits and robbers generally use ganja to fortify themselves to commit crimes with act of violence.

63. There are licensed shops for the sale of each of these drugs in these parts.

69. I think the wishes of the people are not consulted or considered in any way before a shop is opened in any locality, and as at present the shop is located in markets generally, the opinion of the local public is not so much necessary.

100. Evidence of SURGEON-COLONEL R. HARVEY, Officiating Inspector-General of Civil Hospitals, Bengal.

In reply to your No. 215, dated 11th instant, I have the honour to state that my attention has never been specially directed to the question of the use of hemp drugs. I have never held charge of a lunatic asylum, and having been engaged in a special line of practice, have not been in the way of seeing many examples of the habitual use of preparations of hemp. The last case which I can recall at this moment occurred not later than 1871.

I feel therefore that no opinions of mine could be of the slightest value as evidence; indeed on many of the points asked I have formed no opinion, while on others I can only go by hearsay. This being so, I have the honour to return the paper of questions.

Oral Evidence.

I am officiating as Inspector-General of Civil Hospitals in Bengal. I have twenty-nine years'

service. I do not think I have seen a ganja case for twenty years. I saw some cases in the early years of my service ; but I have no notes of them. I think that a man's memory ought not to be trusted after twenty years. My evidence would therefore be hardly worth recording. I have only two cases in my mind. The one was in 1865 and the other in 1870 or 1871. My practice since then has not brought any case before me. My statement before the Opium Commission, that to turn from opium to ganja or alcohol is a very much worse state than the first, was based on the impression that a man under the influence of the excessive use of opium was quiet and only wished to be let

alone, while the man under the influence of the excessive use of ganja was liable to become irritable and, according to the great bulk of authority, liable to become insane. As I have never had charge of an asylum, I cannot speak of this from my own experience ; but I have lately been making inquiry and find that in a large number of the cases in which ganja is put down as the cause of insanity the only evidence has been a statement by the police that the man was addicted to ganja. The result of my inquiry has been rather to shake my previous belief, which was founded not on experience, but on authority, on books.

101. *Evidence of* SURGEON-LIEUTENANT-COLONEL C. J. W. MEADOWS, *Civil Surgeon and Superintendent, Lunatic Asylum, Berhampur.*

Oral evidence.

I have had twenty-four and a half years' service, all but two years being in civil employ. I have been in charge of the Dacca Asylum for four years, of the Patna Asylum for one year, and of the Berhampur Asylum for three years. I was on leave in 1891-92. I had no special experience of insanity at home. I cannot say that I have made insanity a speciality in this country. It is very difficult for the ordinary practitioner to make anything a speciality here. He has too much work to do of all kinds. I have found no literature on the subject of insanity from hemp drugs. I searched in vain last May when writing a report.

The General Register is filled up by the Deputy Superintendent, Mohendro Nath Rai, who has been twenty years in this asylum in this capacity. He has no medical qualifications. He fills it up all in his own handwriting. There is no entry by anyone else for twenty years. He fills it up from the descriptive roll. Whatever is in the descriptive roll is copied out accurately. There is no deviation from the descriptive roll if that document gives information. Only when the descriptive roll is blank is any entry made in the register differing from it. He assures me that this is his invariable practice. And no alterations are ever made in his entries. When the descriptive roll is blank in any particular, he is allowed to fill in that blank when he can get information from the lunatic or from what I have noted in the case book. Sometimes the blank cannot be filled up at all.

The information he gets is as a rule from the lunatic. Sometimes it is from relations or friends who may come to see him, but that is very rare. Most of the lunatics have no friends, or they do not come to see them. The friends are never kept for me to see. We never refer to the Magistrate for further information. The entry in column 9 ("Mental disease") is copied from the case book. That is filled in as soon as the case is diagnosed or there are sufficient grounds to come to an opinion about it. It is not an easy matter. That is the only entry that is copied from the case book. The case book is wholly written up by me, including the abstract of the papers which is entered in each case.

It is from the General Register that the annual statements are prepared. Statement VII is compiled from column 11, "Alleged cause." This column 11 contains the entry in the descriptive roll if there is any such entry. If it is blank, then, if the Deputy Superintendent can ascertain the cause from the lunatic or his friends, he fills it in.

If not, it remains blank. The Deputy Superintendent puts questions to the lunatic, such as, "Do you smoke ganja or take bhang?" or, "What is the cause of your insanity?" He puts such leading questions and tries to get a history out of him. He considers that he should fill in as much information as he can. We do not now accept the cause thus assigned so readily as we used to do. Since attention has been so much attracted to ganja during last year we are much more careful. I try to ascertain, before accepting ganja as the cause, that the type is like ganja, and that it was indeed the probable cause. I did not do that before my attention was thus specially drawn to the matter of ganja : formerly I should have been inclined to accept ganja as the cause if it was mentioned or the use of the drug was acknowledged. It seemed a reasonable cause, and there was considerable pressure to assign cause. I believe that it was the habit in this asylum to accept ganja in this way without going particularly into the matter up to last year. The Deputy Superintendent assures me that this was his experience.

Up to last year the entries regarding the cause of insanity have depended on the descriptive rolls and the inquiries made by the Deputy Superintendent, except that if a case occurred where the entry of cause was evidently wrong, a note would no doubt be made. I can call to mind no such case. The Deputy Superintendent says he remembers no case of alteration of any entry on such grounds. No one thought these entries of any importance, or else more care would have been taken about them.

Now I am endeavouring to be accurate about cause, in respect to ganja particularly. First of all I see the type of insanity, the behaviour of the man, etc., to see whether it is consistent with insanity produced by ganja. Acute mania with violence, raving, peculiar appearance of the eyes (a wild look difficult to describe, but once seen not easily forgotten), etc., is the usual type of hemp drug insanity. These cases usually get well in a couple of months, often a fortnight. I think the general appearance is more typical than anything else—the appearance of the eyes and his excitable irrational manner. With these symptoms I think I should be able to tell a case as one of hemp drug insanity, even without history of the use of the drug. I think I should be able to tell a case of hemp drug insanity directly I saw it, without any difficulty. The peculiar appearance I have spoken of in the eyes is, I think, peculiar to hemp drug insanity. The other symptoms might be found in acute mania due to other causes. But acute mania due to other causes as a rule

continues much longer. The tendency in acute mania due to ganja is to recover when the man is kept away from the drug and kept quiet and properly treated with sedatives. This is not as a rule the case with acute mania due to other causes. My attention has never been directed to transient mania, though I know scientists make this subdivision. I have not seen a case. I lay stress on the rapidity of recovery as a diagnostic mark of hemp drug insanity. It would tend to strengthen my diagnosis. As a rule these cases are due to a great outburst, a debauch. The man who takes ganja in excess for years does not always recover in this way. His case may go on to chronic mania. This is not a very frequent case, not so frequent as the other. I have never seen a case in India of acute alcoholic poisoning. I have at home. I think there would be an analogy between these cases due to a ganja debauch and such a case. I do not see the analogy between ganja cases and advanced *delirium tremens*. They may be like the first day or two of *delirium tremens*, but I have not noticed in them the symptoms you find later in *delirium tremens*. I have never (as far as I remember) made a *post mortem* examination of brains in ganja cases, nor heard of one.

As Civil Surgeon I have had these cases of acute mania from ganja before me under observation, but very seldom. I had only one last year. I remember also a private patient about twelve years ago. These are the only cases I can remember as sent to me for observation. As a rule the cases coming to the asylum are still in acute stage unless they come from the jail or another district. The acute stage is generally past. It lasts from a fortnight to a month, more or less. I have noticed in the eyes the peculiar staring expression and

glitter I have referred to. I have not noticed redness of eye; I am unable to say from memory anything about the pupils; I have never examined the reflexes.

When the acute symptoms have passed off any certain diagnosis is impossible. You cannot speak with any certainty, so far as my observation goes. I should then be guided by what the man said, checked by my record of the case. He is fit to give information. He generally says: "Somebody gave me a drug and I went mad," or something of that kind. The lunatic (even when temporarily sane) varies his statement, however, on these subjects from day to day. There is an absence of typical symptoms; I do not remember any symptoms of ganja insanity visible in a chronic case.

My view of toxic insanity is that it is insanity due to a toxic cause. If ganja is the cause, therefore, the case should be shown as toxic insanity.

I do not attach much value to the information we receive as to cause. The police put down anything they hear or think. Some of the descriptive rolls are utterly absurd. Some contain nothing. Some contain absolute absurdity. As to the diagnosis or statements as to cause they are generally quite ridiculous. It is a most difficult thing to ascertain cause. We give cause too often ourselves. It is insisted on, and we are constrained to enter cause before it has been properly ascertained. The information we get and the statements of insane persons give too often no adequate ground for a statement regarding cause. It is just possible that two-thirds of the entries as to cause may be correct. Certainly that would be the outside. At least one-third of the entries are misleading.

102. Evidence of SURGEON-LIEUTENANT-COLONEL W. FLOOD MURRAY, Civil Surgeon, Shahabad.

1. I have been for twenty-four years serving in India; had medical charge of Native regiments, jails, lunatic asylums.

2. In this part of the country the flat ganja of Dr. Prain is called jatta, the round is called kulli, and the broken, chur. The processes for making ganja described by Dr. Prain are more or less followed in this part of the country.

19. Besides being used for smoking and drinking both ganja and bhang are used as external applications to relieve pain by native baidis (the ganja or the bhang is mixed with other drugs and put in a piece of cloth, then beaten and applied to the painful part).

23. Bhang is very seldom used for smoking purposes and only by those who, being habitual ganja smokers, happen by chance to be unable to procure their ganja. Bhang when used for smoking produces a weak kind of intoxication; is less intoxicating than ganja.

28. (a) Habitual consumers, moderate 1 anna;
(b) hard consumers, 8 to 12 annas.

29. Generally tobacco leaf (the form of tobacco used for eating) is mixed with ganja, and sometimes smoking tobacco. In this part of the country none of the drugs mentioned are mixed with ganja at the time of smoking. Many things are used with bhang, such as flowers of roses, melon seeds, etc., but I know of no preparation sold for the purpose.

30. A convivial party is not a necessity for the consumption of either ganja or bhang; they are both taken in solitude. The practice is mainly confined to the male sex and seldom indulged in by children, though I have met instances of young boys smoking ganja.

31. The habit of smoking ganja and drinking bhang is easily formed. If a man has a little determination, he can easily break off the habit. In my experience there is not the same tendency for the moderate habit to develop into the excessive as in other practices, though such cases may now and again occur.

32. The use of these drugs has nothing to do with religion, and no ceremony, social or religious, enjoins their use.

36. I do not think so, certainly not in the mufassal. Whether it is so in large towns, such as Calcutta, I can't say. Many orthodox Hindus who use bhang would never touch alcohol.

39. The worst form is ganja smoking. According to the Sanskrit Vaidak, smoking ganja and charas is very injurious to the heart, lungs and brain. I have seen myself individuals who were suffering with asthma and weakened heart from the prolonged use of ganja, and numbers suffering from insanity said to have been brought on by the same cause. In all such cases the drug was probably consumed in excess. My reasons for supposing that in most of such cases there had been

excess, is the number of people who indulge not only in bhang drinking but also in ganja smoking with apparent impunity. This morning in the Arrah Jail I took at random a gang of 48 prisoners, and of these 10 were ganja smokers, 8 consumed bhang, and 30 were addicted to neither practice. Their state of health on admission to jail was recorded as follows:—

Admitted to jail.	Ganja smoker.	Bhang drinker.	Others.
In good health .	6	4	13
In indifferent health .	3	3	13
In bad health .	1	1	4
TOTAL .	10	8	30

40. Yes. Bhang is used for piles and to relieve pain ; it is also given to cattle, especially for colic.

41. Bhang has the effect of (a) increasing the appetite temporarily.

(b) I believe the Nagas and other sturdy hill races consume ganja; but that their power of endurance is increased by using the drug I should very much doubt.

(c) I should say not.

42. I am inclined to think that the use of these drugs is much like the use of tobacco or spirits. When taken very moderately, and when a man takes plenty of good food and otherwise lives in accordance with the laws of health, it would appear to be practically harmless, if we may judge by the number who indulge in the habit and compare their physique with those who do not. I append herewith the statements of those prisoners in Arrah Jail, who allow that they smoke ganja.

Ganja-Smoking.

Ramlal Bari.—Aged 69 years, smoked ganja twice a day.

Achhai Lal.—Has smoked ganja for twelve years. Piles relieved by it.

Sahadeo Dusadh.—Smoked from four years twice daily, suffered from dyspepsia, but got cured by smoking.

Kaval Mehter.—Smoked six years, twice daily; suffered from pain in the chest, but is relieved by the smoking. Never felt the worse for it.

Ram Charan Dass.—Smoked five years, has always felt better every way of it.

Bujhawan.—Two pipes daily; felt much better and can work better with it.

Santo.—Smoked ganja as much as he could get; also took bhang and charas. Felt strong at the time of intoxication but weaker afterwards. If a man gets good food and takes only one or two pipes a day, he is no worse for it. I began smoking at the age of about 16 years. I am now 32 years. There is difficulty in giving it up, but after three or four weeks a man does not think any more about it. When I go out of jail I will begin it again, if I feel the desire for it.

Ram Kishen.—Fourteen years and could work better with it. Smoked three times a day.

Ram Lal.—Smoked for three years, twice a day, felt the better for it.

Ghisa Khan.—Three years twice a day; felt all the better for it. Digestion better.

Raghunandan.—Four years; found his appetite improved and worked better with it; never suffered in the slightest from it.

Gopi Sing.—Sixty years of age, smoked ganja twice daily for three years; so long as he took good food was no worse. His digestion was improved.

Jogeshwar Dome.—For five years three times a day; found his appetite improved. Never exceeded this quantity, never cared for more.

Candabir.—For four years; appetite increased.

Sanker Kahar.—For ten years; was at first smoking one or two pipes a day, but by and by habit grew stronger; now he can smoke as much as he can get. Before smoking he was stronger and more healthy than what he is at the present. Its smoke when inhaled by force goes up to the brain of man and turns mad. It is more injurious in summer than in winter. It makes senseless if smoked without taking any food.

Rupa.—For two years; appetite increased.

Rijan.—For one year, twice a day; appetite increased, health improved. Growing daily weak as he does not get ganja in jail. Can do more work if he be allowed to smoke.

Halu Ahir.—For two years; makes man of mild temper; does not get angry; is growing weaker as he is not getting ganja. It makes a man happy when intoxicated; appetite increased.

Evidence of 17 ganja smokers taken on the 12th November, Jail population on that day being 255.

45. I am informed by Pundit Barhmo Deonarain Misser, to whom I am indebted for his information, that the moderate use even of all these forms of hemp is bad; and besides the fear of insanity and idiocy, there is the danger of asthma, dysentery and injury to the digestive organs. I am, however, inclined to think that where such results occur the drug was somewhat immoderately used, or else that it was made to do duty for good food.

With regard to the connection between insanity and the use of hemp, I am not prepared to say that in many cases weakness of intellect may not have impelled many to the immoderate use of the drug; but from what I have seen in lunatic asylums I think there can be no doubt that excessive ganja smoking was the exciting cause, if it did not actually beget the disease. As a rule the recovery of these cases was a matter of time, which would of itself tend to prove that the insanity was dependent on the use of the drug. I am unable to give any instances to illustrate these views as I did not keep any notes of these cases.

47. No.

49. I neither know, nor can I learn, that the drug is ever used for this purpose. Ganja smoking if immoderately indulged in, will produce impotency.

Oral evidence.

Question 1.—I have been five years in military service and nineteen years in civil employ in Bengal. I had charge of Dullanda Asylum in Calcutta, about sixteen years ago for one year. I have had no special experience of insanity apart from that.

Question 39.—About asthma and weakened heart, I have nothing to say from cases under my observation. The cases I saw were cases I had to search for; I searched for them after getting these questions. In twenty-four years' practice I have never had to treat a case. A

native hakim brought me one case of asthma and this case also had a weakened heart. I believe the man is dead since. I had only the history of the case from the native hakim. I had not the case under observation. I do not know how much the man consumed. But I believe he was a large consumer. I examined the man and found he had asthma; but I am not prepared to assert of my own knowledge that this was due to ganja. That was merely the history I got. If I had not been told that it was the result of ganja, I should never have known anything about it.

There was another case. I do not remember who brought it. The circumstances were much the same. In this case also I was guided by the history. The general statement, as contained in my written answer, is a statement made to me by this hakim and others to whom I applied for information. My own experience in no way corroborates it.

As to insanity, I would refer to my answer No. 45, which shows that my view is based on my asylum experience. I have no experience apart from that. I have never been consulted in any case in which I have been told that the man was suffering from the effects of ganja, either insanity or other illness. My general impression is that ganja is an exciting cause of insanity, as alcohol is. Probably in most cases there is a weak brain, which the ganja acted on, or a tendency to insanity. I cannot say that it may not also originate the disease. In fact, when taken in excess, I believe it does. I can do no more than state these general impressions. I may add that my general impression in regard to ganja is that, considering the numbers that use it, the injury it does is infinitesimal, and that, with good food, ganja in slight quantities never does harm. As to bhang, large numbers of people take it without injury hereabouts.

103. *Evidence of* SURGEON-LIEUTENANT-COLONEL J. F. P. McCONNELL, *Professor of Materia Medica, etc., Medical College, Calcutta.*

1. No special opportunities, only such as have arisen in connection with my duties as a Medical Officer serving in Lower Bengal for over twenty-two years.

2. *Siddhi*.—I have always understood this term to indicate an *intoxicating beverage* prepared from the leaves of the hemp plant.

Charas.—Yes.

Ganja.—Yes.

I know nothing about these varieties of ganja (flat, round, chur).

19, 23 and 28. I do not know.

29. I have heard that dhatura is sometimes mixed with both siddhi (the drink), and majun, the sweetmeat manufactured from hemp leaves.

No, I do not know bhang massala.

30, 31, 32, 36, 37, 39, 40 and 41. Not known.

42. Except as a medicine, I consider their use, even in moderate doses, to be harmful.

44. (c) Yes.

(e) Yes.

(f) It varies according to the dose and individual—from one hour to four or five hours.

(g) Headache, thirst, listlessness.

(h) Yes.

45. (a), (b), (c), (e) Not known.

(d) No.

(f) Not known. There are no typical symptoms in moderate doses.

46. The habitual *excessive* use I know nothing of; the *occasional* excessive use may be the exciting cause of temporary insanity (mania). I have seen a few undoubted cases.

47 and 48. I do not know.

49. Yes, I have heard so. I do not know if this use is more injurious than the ordinary use. I have heard it does tend to produce impotence.

56 and 57. Not known.

Oral Evidence.

I have been over twenty-three years in India, almost entirely in Calcutta in connection with the Medical College Hospital. I have been Resident

Physician and Professor of Pathology, and am Professor of Materia Medica at present and Second Physician to the Hospital. I was Pathologist to the Hospital for ten years, and have paid special attention to Pathology. I do not know of any literature regarding the pathological effects of hemp drugs. I do not think that there is anything known of the pathological appearances produced in the brain by hemp drugs. I have no special experience in insanity, and have not in my practice had opportunities of examining the brains of insane people; for I have never been in charge of an asylum.

I never examined any brains of ganja-smokers at the College while Professor of Pathology. That is, I have never, as far as my recollection serves me, examined the body of any man who died of any disease in hospital and of whom it was brought to my notice at the time that he had been a ganja-smoker. I am the author of a catalogue of pathological preparations in the museum of the Medical College, Calcutta. There is no mention of any ganja-smoker's brain.

I am familiar with the physiological action of the hemp drugs. From its known physiological action, I should expect to find no effect on the brain of a person using the drug in moderation. It is impossible to say whether any effects would follow the continued use of the drug in excess. I have no personal experience. But speaking from the analogy of certain drugs which have similar physiological effects, when used excessively, I would expect to find a condition of what is termed hyperæmia of the brain and membranes. The other drugs I refer to are drugs like dhatura, belladonna, hyoscyamus, etc. Such a condition of hyperæmia could not, I think, last a very long time—I cannot positively say how long, without giving rise to structural changes. I think that probably there would be changes in the nerve cells and fibres of the brain and alterations in the way of thickening, opacity, and so on, in the membranes. Those conditions would be permanent. This would be from long-continued hyperæmia. Hyperæmia with intervals of rest might also give rise to structural changes I think. These pathological changes would not, I think, be coarse changes that you could detect from naked eye inspection of the brain. They would have to be

specially sought for with the microscope. Microscopic examination would be essential for the detection of these changes.

Except that both alcohol and hemp drugs are exhilarants or inebriants, these two intoxicants are not analogous. It is in the objective symptoms they produce that they are analogous. I understand that I am being examined exclusively about the medicinal and pathological effects of the drugs. I consider that physiologically they act in a different way. In the smaller doses both hemp and alcohol are exhilarant. The effects of larger doses of hemp are distinctly narcotic, whereas alcohol is not a narcotic, but induces a condition of coma when taken in large quantities.

This condition is one from which an individual would be aroused with much difficulty, whereas the narcotic effects of Indian hemp are transient and of short duration. Here I speak of the medicinal use of the drug as a narcotic, not of the use of the drug otherwise. I am discussing solely medicinal effects. Alcohol would produce hyperæmia of the brain. This condition, if allowed to continue, gives rise to structural changes. Hyperæmia from any cause, if allowed to continue, will give rise to structural changes. I do not experimentally know what the structural changes produced by hyperæmia through hemp drugs are; but assuming that they are produced, I should say that it would not be possible to distinguish them from those produced by alcohol.

104. *Evidence of* SURGEON-LIEUTENANT-COLONEL A. CROMBIE, M.D., *Surgeon-Superintendent, General Hospital, Calcutta.*

1. Chiefly as Superintendent of the Dacca Lunatic Asylum for seven years, and Member of Standing Committee for advising Government with regard to criminal lunatics.

2. I have no experience except with regard to the smoking of ganja.

3. and 14. I offer no observations in these chapters (II and III).

19. In Dacca and Eastern Bengal the use of hemp is confined almost exclusively to the smoking of ganja.

20. Ganja is smoked to a large extent by the boatmen, but also by the agricultural classes generally.

21. I believe flat ganja is mostly used.

23. I think not in Eastern Bengal.

24. Very few in Eastern Bengal do either.

25. I am not aware of any increase, but the statistics of the Eastern districts would prove this. They are not available to me.

27. The boatmen have very long hours. They work in the sun and rain from 6 A.M. to 8 P.M., snatching one meal at 11 A.M. They believe that ganja-smoking gives them the necessary endurance.

28. I do not know.

29. I do not think it is much mixed.

30. Mostly in company. Mainly confined to males; never children.

31. Easily formed. I do not think there is much tendency for the moderate to extend into the excessive use. Not so much so as in the case of opium.

32. I cannot give any trustworthy evidence on this point.

33. I think it is generally regarded as harmless and its excessive use only as disreputable. I cannot answer the other parts of the question.

34. It would be regarded as a hardship.

35. I think it is not feasible on account of the growth of the wild plant. I believe the prohibition would lead to extended recourse to alcohol and opium. Alcohol is more harmful than ganja in all respects, but opium much less so.

36. I do not know.

37. I only know the effects of ganja-smoking.

38. I am not aware of it.

39. I have had no opportunities of comparison.

40. Yes; preparations of ganja are much used in the treatment of dysentery and asthmatic affections.

41. (a) and (b) These are the purposes for which it is habitually used.

(c) I am not aware that it has any preventive or febrifuge properties.

42. In the vast majority of cases the habitual use of ganja produces no appreciable bad effect either bodily or intellectually. A ganja-smoker is not distinguishable from a non-smoker.

43. No; only exceptionally.

44. It is refreshing; it does not produce intoxication. It enables him to do a long day's hard work on one meal. It is usually taken in repeated whiffs throughout the day. I have not seen any after-effects in these cases, and I have spent days in company with native boatmen habitually using ganja in moderation.

45 and 46. (a), (b), (c), (d) I am not aware of any, but if any were produced the use would no longer be moderate, but excessive.

(e), (f), (g) When smoked in company by young men it may readily be a source of laziness, immorality and debauchery, but not so when smoked as by hardworking boatmen. Nearly 30 per cent. of the inmates of lunatic asylums in Bengal are persons who have been ganja-smokers, and in a very large proportion of these I believe ganja to be the actual and immediate cause of their insanity; but though I am not prepared to say that moderate use of ganja is never the cause of insanity, it is most frequently the result of long excessive use, and especially of occasional debauches with the drug. It has much the same relationship to insanity in India that alcohol has in Europe, and may be the cause of fierce maniacal excitement of short duration (as in delirium tremens) or of a chronic cheerful mania which is the characteristic insanity of Indian asylums. It has not the same tendency to lead to dementia, the result of tissue changes in the brain, as alcohol has. Like alcohol it will especially lead to insanity in persons of deficient self-control, who take to the drug as a relief from mental trouble. Both forms of ganja insanity, the acute and chronic, are distinguishable by the symptoms (see separate memo).*

47 and 48. I have no means of forming an opinion on this question.

* Appended.

49. I understand that it is used for this purpose, and is popularly believed to have this effect. It is used by prostitutes, but I do not know if it is so used for this purpose. I am not aware that it leads to impotence. A Bengali metrical proverb, published by Dr. Morison, of Rajshahi, is to the following effect:—

The ganja-smoker cherishes his wife.

The opium-eater's wife is a widow.

The drunkard is a Brahmini bull (*i.e.*, brutal and uncontrollable).

51 to 53. Much of the violent assaults and all the cases of "amok" that came under my notice in connection with insanity were committed by ganja-smokers. And most often as the result of a single excessive debauch even in those accustomed to the moderate use of the drug. In these cases the crime was unpremeditated and the criminal subsequently appeared to be oblivious of the circumstances. I have known many cases of temporary homicidal frenzy produced in these ways.

54. I am not in a position to answer this question.

55. I believe that complete oblivion can be produced by hemp, and not always accompanied by maniacal excitement.

56 and 57. I am not in a position to answer these questions.

58. I have nothing to say on these questions.

Further written statement put in by
DR. CROMBIE.

The statistics of Indian asylums show ganja as the alleged cause of insanity in nearly 30 per cent. of the cases as against 5·3 for spirits and 0·36 for opium. In none of these is it contended that the alleged cause is the actual cause either predisposing or immediate in all the cases. Certainly with regard to opium it may be said with every confidence that the figures given are merely statistics of the number of inmates who are known to have been addicted more or less to the habitual use of opium previous to their confinement in a lunatic asylum; and the number of these is so small taking into consideration the great prevalence of the opium habit (it may be said without fear of contradiction that probably 1 per cent. of the entire population of India are opium-eaters), and as they exhibit no signs by which they can be distinguished from other inmates, either by their physique or the character or type of insanity they exhibit, that the use of opium in no way favours the development of insanity among the population. Keeping in mind the prevalence of the alcoholic vice in European countries, where some 25 per cent. of all the cases of insanity are traceable directly or indirectly to drink, it must be admitted as more than probable that the cases of lunacy attributed to alcohol in this country must be regarded differently, and that a considerable proportion of them are in reality due to the alleged cause. The same objections might be raised in the case of alcohol as in that of hemp, namely, that previous mental disease and especially mental weakness may have led to the indulgence in the drug to obtain relief from mental distress, etc.; but there are I believe better grounds for regarding ganja as the actual effective cause of insanity in a larger proportion of the cases attributed to it than holds even in those attributed to

alcohol in Europe. I refer to the peculiar characters of this form of toxic insanity by which it can be recognised just, or nearly, as readily as those of delirium tremens distinguish alcoholic intoxication. To enable me to do so clearly it is necessary to distinguish between acute ganja intoxication due to a single debauch, or to continuous excessive use of it of what might be called a bout of ganja drunkenness, and the effects of its continued immoderate use over a lengthened period of time.

(a) Acute ganja intoxication is marked by the extreme vehemence of the mania. In its mental, moral, and muscular manifestations it bears no resemblance to alcoholic intoxication whatever. The maniac is excited in every fibre. His aspect is infuriated, his eye glares and is tense and glistening, while at the same time the conjunctiva is red and injected. He shouts, vociferates, sings, walks quickly up and down or round his cell, and shakes the door out of its fastenings. If at liberty, he is violent and aggressive and may run *amok*. In other cases the mental disturbance is less marked, but the demeanour is excited, and he suddenly seizes some weapon and slays one or more of the people in his neighbourhood without apparent reason. The attack is of short duration, being limited to a few days. There is then perfect recovery and the patient is oblivious of things which took place during the period of intoxication. In a good many cases there are relapses of similar maniacal attacks without the possibility of a renewal of the cause; but this especially happens when there has been a habitual excessive use of the intoxicant. Most cases entirely recover, and those in which the mania was caused by a single debauch in a person unaccustomed to its use almost invariably do so, there being no sign of insanity any time subsequent to the disappearance of the original symptoms.

(b) The insanity produced by the long-continued immoderate use of ganja has also features of its own. The patients are hilarious, attitudinise, and are full of the sense of well-being; they as a rule are good-natured and trustworthy, and recover in a large proportion of cases under confinement and deprivation of the drug. These cases characterise Indian asylums by the large number of happy amusing lunatics they contain. They are, however, very subject to relapses even after lengthened periods of freedom from symptoms. Melancholia is in my experience never caused by ganja, and dementia only as a secondary effect of chronic mania.

I am unable to give specific cases in illustration of these remarks, because I have no longer access to the books of the Dacca Asylum where my experience was gained. I have, however, clearly in my mind one case of a Bengali Babu, who, as the result of a single debauch, in an attack of ganja mania, slew seven of his nearest relatives in bed during the night, made a rapid recovery, and never again exhibited signs of insanity during the ten years he was under observation.

Oral Evidence.

I have been about twenty-two years in the service, and almost the whole of that period in civil employ. I have served only four years out of Lower Bengal (two years in Simla and two in Burma). I was seven years Superintendent of the Dacca Asylum and am a visitor of the asylums in Calcutta. I am also a member of the Committee for advising Government about crimi-

nal lunatics. I was also the author of the rules drawn up by the Committee of 1888 regarding the disposal of criminal lunatics. I have no other experience of insanity apart from this and no special training in the subject. I have visited asylums at home, but never held charge of one.

In my practice outside of lunatic asylums my experience is confined to very few cases—only two or three in the whole course of my service—of ganja intoxication brought to hospital.

I have had no experience of any diseases attributable to ganja. My experience has been chiefly in Eastern Bengal, where ganja is largely consumed, and I have often travelled for days together with boatmen who used ganja regularly in a moderate way. Nothing in their appearance or demeanour showed this. I have only known it because I have been informed. There is one exception, my own darwan, in whom I frequently see what I believe to be the effects of ganja. He is loud and excited in demeanour. That is the only effect. He both smokes and drinks hemp. He is in thoroughly good health (except that he has elephantiasis) and is quite trustworthy. In regard to literature regarding the effects of the hemp drugs, I know only the ordinary literature that everybody knows. I know of no special literature dealing with the subject. In regard to insanity, there is no reference at any length to ganja or hemp as a cause of insanity in any literature I know.

I have made a large number of *post-mortem* examinations in cases of lunatics whose insanity was believed to be due to ganja and who died in the asylums. I did not make these examinations with a view of studying the effects of ganja, but in the ordinary course of duty. I found no pathological change that could be attributed to ganja. There are always changes in the brains of lunatics; but the ganja cases did not seem to me to differ from other cases. The most frequent changes are shrinkage of the brain generally, want of symmetry of the two sides of the brain, effusions of serum to fill up the space left by the shrunken brain, and I think diminution in the thickness of the grey matter. These are the appearances which occur in cases of chronic insanity. The acute mania which I believe to characterize ganja insanity is never fatal in my experience. The appearances found in the chronic ganja cases are those that are found in other cases of secondary insanity from whatever cause it may have originated. I have never made any minute microscopical examination of the brains in such cases; and I think it most improbable, in our present state of knowledge of the structure of nerve cells, that any distinctive appearances would be detected by the microscope.

With regard to chronic insanity caused by alcoholism, certain changes would be recognizable especially in the connective tissues surrounding the nerve cells for the reason that alcohol is a tissue poison. Ganja is not believed to be a tissue poison. This has not been investigated, but it is like other vegetable poisons which do not act on the tissues generally. Examples of this are datura and belladonna, which leave no anatomical change behind so far as is known: no anatomical changes have been traced to them.

I must have examined the brains of ganja smokers who were not insane, as I have made many *post-mortem* examinations in Eastern Bengal. But I cannot refer to any in particular. I have

not met with any changes which I have been able to recognize.

There is no literature on the pathological effects of the drug that I know of.

I have made no physiological experiments on animals and know of none. I have no knowledge of the physiological effects of the drugs apart from the clinical effects.

My experience is practically confined to smoking. I know that the drug produces intoxication when smoked. The symptoms produced are entirely referable to cerebral excitation, to excitement of the brain cells. This entirely predominates over any soporific effect which it is said to possess and which is subsequent to the excitation and is of short duration. I would expect to find certain pathological changes in a brain examined in such a case; but I have never had an opportunity of examining one. I would expect to find hyperæmia of the brain (increase of circulation) such as is found when excitement is produced by any other cause and of which there are symptoms in a man's appearance. This is all. These conditions would pass off. In a case where this has occurred for the first time or at infrequent intervals, I should expect the brain to return to an apparently perfectly normal condition. I say so because the brain functions become perfectly normal and leave no trace of anything of the kind. On the other hand, if I had this condition of hyperæmia long continued by repeated exhibition of the drug, I should expect to find chronic changes. They would be of the kind I described earlier. They would lead to atrophy, to shrinkage, and such grave nutritive changes, not distinguishable from those produced by cerebral excitation of other kinds except perhaps alcoholic.

Alcohol irritates the whole elements of which the brain is composed, the tissues in which the nerve cells and nerve fibres are embedded, as well as these elements themselves: whereas ganja and other vegetable excitants apparently confine their action to the nerve elements: but I say all this subject to correction, which may come as the result of more careful pathological research.

Question 27.—My experience of the beneficial effects of the drugs is practically confined to these boatmen, and I am quoting rather the belief on which they take the drug. I have hardly sufficient grounds for forming an opinion of my own except that I have been struck with the extraordinary endurance of these men. These are the only class of labourers with whom I have intimate acquaintance. In that part of answer No. 44 which deals with this subject also I am rather quoting the generally received opinion on this point than expressing any established opinion of my own.

Question 31.—The basis of my opinion that the moderate use of ganja does not readily develop into the excessive is my having lived long in a district where the drug is largely used and having known only very rarely cases of excess. I have no continuous observations of individuals to record. But I base my statement on the general impression derived from observing the population, and seeing so few excessive consumers. I should cease to call smoking moderate when it began to affect the man's demeanour. That would be my definition of moderate smoking.

Question 35.—The opinion here expressed that alcohol is worse than ganja is regarding the

use generally. I believe that the habit of using ganja moderately is absolutely harmless; but I think even the moderate use of alcohol is liable to produce tissue changes in the long run. Further, I here refer entirely to the native community; and it is my observation that when a native takes to alcohol it is extremely difficult for him to remain moderate; and in life assurance work, of which I have a good deal, I always advise an extra premium in the case of any native who indulges in alcohol even in the most moderate way, and utterly refuse to accept a native life if there is evidence of the consumption of alcohol to any considerable extent, which would still be considered moderate in the case of Europeans. This of course refers only to the upper classes who come for life assurance. But my experience leads me to hold the same view of the effects of alcohol on the lower classes. A native who takes to liquor is lost. This is founded on my hospital experience and my experience as a medical practitioner. I am decidedly of opinion that in Bengal alcohol is absolutely evil. I am aware of the large extent to which alcohol is used in Bengal. It is used probably more than ganja. It is difficult to say, because ganja is so much cheaper.

As regards the excessive use, I would still place alcohol first. I regard it as most deleterious. This is a comparison of evils; and I think that the evils of alcohol seem to me to over-balance altogether the evils of ganja. I would instance my own darwan, who takes ganja or bhang in excess, but is always at his post and capable of doing his duty. If he took alcohol in excess to the same extent he would be useless to me and utterly untrustworthy. Then I think also that the social evils of alcohol in excess are much greater. The excessive use of ganja in this country would never lead to the misery produced by the excessive use of alcohol, say, in Scotland or London. The effect of the excessive use of ganja may be to produce a sudden outburst of violence which would naturally lead to the incarceration of the man in an asylum. This is not the character and result of alcoholic excess. It leads to more chronic misery. Alcohol also produces disease of almost every internal organ and premature death. Dysentery is attributed to ganja; but I do not know of any good ground for that belief. There is no reason that I know of in the known physiological action of the drug to believe that it should cause dysentery. Chest affections are also attributed to ganja; but I have no reliable information to give on that subject. I know of no other disease which the drug causes.

In regard to opium, I would distinguish between opium-eating and opium-smoking, taking first opium-smoking. Like ganja, opium is smoked in company, and it is therefore an incentive to idleness, dissipation, and bad company, with all its results; and I believe that the habit of smoking opium obtains a firmer hold on the smoker than in the case of ganja. It is also very expensive, which ganja is not, and leads sooner to the ruin of the individual and his family. On the other hand, opium-smoking does not lead to the commission of violent acts, and apart from the individual and his family, leads to no general evil as regards the community at large. After his smoke he walks quietly home and does no harm. But the ganja smoker is liable to sudden outbursts of violence, which may lead to murder sometimes of a wholesale kind. My experience leads me to believe that ganja is generally smoked in company. And my statement regarding outbursts of violence from ganja is based on my knowledge

of cases which have been before the criminal courts. In regard to opium-eating, the opium-eater is as a rule a respectable, well-doing member of society, who takes his opium pills before leaving his house in the morning, goes about his business, and returns without any apparent effect from the drug. I think there is a respectable use of ganja corresponding to this—the moderate use. But I am told that ganja is more commonly taken in company than privately.

My personal experience has been chiefly of the excessive use of ganja; and I set this down as more deleterious than excessive opium-eating, which is essentially the habit of elderly people, but not more deleterious than excessive opium-smoking. I think that the effects of excessive opium-smoking are worse to the individual, though not so dangerous to the community.

Question 49.—I am not prepared to give any personal opinion on the subject of the aphrodisiac properties of the drug.

Question 51.—I draw no distinction between cases of violence due to ganja and cases due to insanity attributable to ganja. I regard objectless crime resulting from ganja as a form of insanity, as it would be regarded in the case of delirium tremens. It is so regarded medically. The ganja habit, no doubt, gives rise to an irascible state of mind, which state of mind renders a man more likely to commit acts of violence even when he is not under the immediate intoxicating influence of the drug. Cases arising from such irritability would come before me as attributed to ganja. But when I wrote my answer to question 51, I had also in my mind a second class of cases due to the maniacal excitement produced by ganja intoxication. I did not distinguish between these two classes. This maniacal excitement is insanity—temporary insanity produced by intoxication. My answer is based on my Dacca Asylum experience, though I cannot specifically state any other than the case mentioned in the end of my supplementary memorandum, and I have a recollection of one other. The Dacca Asylum books would show these cases. I have also had cases before me in connection with the Standing Committee on insane criminals. The cases that come before this Committee are about forty per annum, and about ten would have a history of ganja, more or less reliable. If there is a history of ganja, the period of detention is longer, and the criminal also has a period of probation (with access to the bazars) to see if he has overcome the habit. Therefore the matter is carefully considered. These special measures would have to be taken if the man had a ganja history. Whether his crime was due to ganja or not, that would not affect our procedure. The question with us is whether the man ever took ganja; not whether the crime was due to ganja. I cannot tell at all in what proportion of cases the crime was attributable to ganja.

Question 45.—I have described certain symptoms of hemp drug insanity. Cases of insanity from hemp drugs may be divided into three classes, as shown in my paper.

(1) *Acute mania.*—As to duration, it varies very much. In some it is over in two days; in others it lasts ten days. The symptoms do not suddenly cease. There is gradual subsidence. I do not think there is any positive statement to be made regarding the pupils. My recollection is that the pupils tend to contract, but they are not stable. They dilate in the dark and contract in light. This is my recollection only, and it must

also be remembered that it is difficult to examine a maniac's eyes. But the pupils are certainly not dilated as with belladonna, nor contracted to a pin point as with opium.

In these cases of acute mania ganja may be the exciting cause with another cause as predisposing. Transient mania cannot easily be distinguished from hemp drug mania; but one gets accustomed to the physiognomy of a case of ganja intoxication, by which you recognize the case as one of more than probable ganja mania. The chief points are the extreme vehemence of the symptoms and the alert, excited appearance as of keen intelligence, which is very difficult to describe; and there is the history of ganja. Cases of transient mania occurring in Europe are, however, characterized by extreme violence and homicidal mania; and I do not think there is any one symptom by which cases of transient mania could be distinguished from hemp drug mania. These cases in Europe are very often associated with the use of alcohol. They are attended with homicidal impulses. I am not aware of their occurring in any one class of society. There is in regard to hemp drug mania an absence of any typical symptom. In any individual case the diagnosis would depend on the history of ganja; but in a series of cases you would anticipate the ganja history, that is, the experience of a series of cases would lead one to predicate ganja; but this would be more or less of an assumption—a provisional diagnosis, which would not be regarded as certain or final without a history. But in the absence of history it would go down in asylum records as "probably ganja."

The use of dhatura may give rise to acute mania of this character. You could distinguish it by the dilatation of the pupil, which is wanting in ganja. Dhatura is more soporific than ganja.

(2) The chronic mania due to ganja could not be diagnosed apart from history. But still there is a general character given to an Indian asylum by the number of chronic ganja cases, which, I believe, is peculiar. This character is given by the large number of happy attitudinizing and singing lunatics, the majority of whom are ganja cases. We also have patients presenting similar appearance in English asylums; but the character given to an English asylum is given by the melancholics. But the character of the Indian asylum is given by the chairmaniacs or light-hearted maniacs. I cannot say whether this character is found among the asylums of Southern India, where insanity is much less attributed to ganja and the drug is less known. It is possible that this difference of character between English and Indian asylums may be due in part to the difference of character between the two races. But I do not accept this as an adequate explanation in view of the fact that so many of this special class recover entirely in India. The large number of recoveries is in the ganja members of this class and is due to the deprivation of the drug.

(3) The cases that have gone on to dementia have nothing typical about them.

In all of these three classes there may be a predisposing cause, just as in alcoholic insanity there is frequently a predisposing cause; and the one class often follows on the other, *viz.*, chronic on acute mania, and dementia on chronic mania. It may be quite true that in some insanity cases a tendency to insanity may have made a man take to ganja as to any other stimulant; but that does not militate against what I have stated; for the

ganja is that which leads in these cases to the immediate outbreak of insanity.

In regard to the procedure in recording the cause of insanity, the lunatic comes into the asylum with a descriptive roll in which the cause of insanity is recorded by the police. This is by no means trustworthy. The inquiry is made by the police. I have myself seen an inquiry going on in which a constable was filling in the papers from the statements of the lunatic himself, the man being at the time insane. This may be exceptional, but I have seen it. In any case I distrust this descriptive roll. Besides this we have (but only in criminal cases) the judgment, in which the point is frequently raised and discussed as part of the defence. Besides this, there is the mark on the hand and thumb of the ganja smoker, which, if present, immediately distinguishes him as a habitual smoker. Then we have frequently some time in the course of his incarceration an opportunity of interrogating his friends who come to see him, and finally we have the confession of the lunatic himself on his recovery that he used the drug. These remarks apply chiefly to the cases of criminal lunatics, because of the effect of the association of ganja with their case on the subsequent treatment. We do not take the same pains in regard to non-criminal lunatics. My recollection is that these subsequent discoveries would alter the entries in the asylum books from which the annual statements were compiled. This was my practice. Any information which I was thus able to get subsequently would have its effect on the entries in statement VII. That is to say, the cause of insanity was not determined once and for all from the descriptive rolls when the lunatics came into the asylum. This statement refers to all lunatics, though the inquiries would probably be more careful in the case of criminal lunatics. I am speaking from memory.

I have heard read the statement of Ramesh Chandra Sib (witness No. 131). He is a thoroughly truthful and trustworthy man. I think his statement may be more safely taken than mine in regard to the entries he has all along made as to cause and the annual statements compiled therefrom. I suppose I must be mistaken, though I have a recollection of correspondence about alterations in the statements from reclassification. These may have been in regard to type. There was no discussion of cause in any annual report written by me from Dacca, nor any formal discussion in writing. It has been distinctly the habit in the Dacca Asylum and elsewhere to put down the insanity as due to ganja in any case where the descriptive roll mentioned ganja at all as having been used by the man. This would be done if the entry under heading No. 9 showed that the man was "addicted to ganja," even though No. 10 showed "cause unknown." The only reason is that we jump at any possible cause and put it down. We should do this without inquiring as to the extent of use. It is impossible to get at this. Of course this would only be done if there was no other cause mentioned. I do not think that it is fair thus to attribute insanity to ganja in the case of all smokers. It appears, then, that the statement No. VII is based on the descriptive rolls, modified so as to have ganja shown as the cause in every case where the descriptive rolls show that the man used the drug and no other cause is given. These descriptive rolls are not reliable. The figures, then, are not to be accepted as absolutely representing the proportion of

lunatics admitted to asylums whose insanity is caused by ganja. But they may be fairly taken to represent the proportion which ganja-smokers bear to the rest of the population of the asylum. That is how I have regarded it. By ganja-smokers I mean people who have used the drug in any degree.

What I mean is that as practically every smoker's insanity is attributed in the returns to ganja, the returns really show, not the number who have gone mad from using ganja, but merely the number of lunatics who are also ganja-smokers or have used the drug. That is all I find in the returns. To ascertain the effects of ganja in producing insanity it would be necessary to compare this proportion of ganja-smokers inside the asylum with the proportion of ganja-smokers in the outside population. That is, if the proportion of smokers outside was ten per cent. and the proportion of smokers inside was thirty per cent., then two-thirds of the ganja-smokers inside the asylum may legitimately be taken as insane through ganja. I could give no reliable idea whatever as to what is the proportion outside. That is a matter for native evidence mainly. Therefore I can give no reliable idea as to the amount of insanity really due to ganja. On the other hand, I believe myself that it is a cause of insanity in many cases. The only justification of the comparison of these proportions inside and outside the asylum is that ganja is an ascertained cause of insanity in a certain number of cases. In comparing these proportions we would have to remember the classes from which the lunatics come to our asylums.

Taking now the records shown me of all the so-called ganja cases admitted in Dacca in 1887 (my last year) I find—

- (1) Gopal Chandra De.—The cause assigned in the descriptive roll is grief and jealousy, and I do not think this should have been entered as a ganja case, merely because he was addicted to the drug. He also drank occasionally. This case would more properly be put down to grief or jealousy.
- (2) Guru Dayal, cooly.—Was addicted to spirits as well as ganja. It is a mixed case, that is to say, it is doubtful which is the cause.
- (3) Isan Halder.—This case seems a ganja case, though the man is still insane. It is a chronic case. There is nothing, however, absolutely characteristic in the case. There is no other assigned cause.
- (4) Harish Chandra's does not seem to have been a ganja case. The man became insane in jail, and the chances are against ganja being the cause. It was a case of very brief mania.
- (5) Rampriya Brahman's case was clearly not ganja. Insanity due to peripheral irritation is well recognized. That was probably the case here, as there was no improvement for one year until the man passed four hundred worms, after which he steadily improved.
- (6) Nathu Singh's case was possibly a ganja case, although the man is still insane; a chronic case.
- (7) Bishnu Ram's case was probably a ganja case. There is not much reason to doubt it.
- (8) Sohan Panchi's case was complicated with epilepsy. Epilepsy is often followed by violent crime, such as this man is charged with. Epilepsy is a cause of insanity.

Ganja is believed to be a cause. It would be difficult to say which is the cause. This is a mixed case. Some of the symptoms point to its being probably ganja rather than epilepsy

- (9) Gobra's is probably a ganja case. There was no other cause given and it was violent mania gradually subsiding.
- (10) Musammatt Jagat Tara's is more likely a liquor case. There is nothing characteristic of ganja and the woman took liquor.
- (11) Brajanath Surma's case is probably a ganja case, there being no other cause apparent; and the sudden violence of his conduct makes it probable that ganja was the cause. The prolonged duration is not against this view. All do not recover. He is still insane.
- (12) Ananta Baisnavi's was possibly a ganja case. There was, however no violence. The probability was that she was never insane at all. She was a little excitable. That may have been from any cause. There seems to have been no insanity.
- (13) Kakaram Changa's case is possibly ganja. One would need to know more of the circumstances of the "grievous hurt" he caused. But the seven years' duration up to now in the case of a lad of twenty is clear against the drug. There is nothing in the records to make one regard this as a ganja case.
- (14) Rajkumar Roy is shown in the descriptive roll as using dhatura, bhang, ganja, and opium. I exclude opium as a cause. I am not aware that I have seen a case of insanity unquestionably due to dhatura. I therefore regard this as due to hemp drugs.

That is, in this year we have out of fourteen, five cases probably due to hemp drugs, three of which are mixed or doubtful in cause, and six of which I should exclude from the hemp drug category. Taking my whole asylum experience I think that this may probably be accepted as fairly representative of the real state of the case. I cannot of course say more than this. The admissions for the year 1887 were fifty-five, of which these fourteen were attributed to ganja.

Note by the Commission, appended to DR. CROMBIE'S evidence.

Dr. Crombie in the last sentence of the Appendix to his written evidence says: "I have, however, clearly in my mind one case of a Bengali Babu, who, as the result of a single debauch, in an attack of ganja mania, slew seven of his nearest relatives in bed during the night, made a rapid recovery, and never again exhibited signs of insanity during the ten years he was under observation." Before the Opium Commission, Dr. Crombie was reported to have alluded to the same case in the following terms:—"I have never known a case of 'running amok' produced by opium. In my experience it has invariably been caused by ganja. I know the case of a young Bengali who indulged in a single debauch with ganja. He went round the house at night and slew seven of his own relations in their beds."

Dr. Crombie was able to give the Hemp Drugs Commission sufficient clue to the records in this case, and they were obtained. The Asylum papers showed that the man, Kailash Chandra Maulik, was sent to the Dacca Asylum from

Faridpur with a certificate from the Civil Surgeon, dated 19th June 1877. This certificate stated that he "has a vacant look, is slow and hesitating in his speech, does not sleep much, remains in one position quietly for hours together, does not speak to anybody unless questioned, and sometimes cries. In fact he has the look of a confirmed lunatic, although he had no fit of excitement while in this jail. He has been sent to jail for having killed six of his relatives in a fit of excitement." The Descriptive Roll, dated 6th June, signed by the District Superintendent of Police and forwarded with the lunatic, showed that he had been insane "two months"; that "previous to arrest he was addicted to opium and ganja"; that the cause assigned for his insanity was "his mother's death, as well as addiction to ganja and opium"; and that the circumstances of the case were that "some time before the murders he became deranged in his mind on his mother's death, which, and his addiction to ganja, brought on a fit of insanity under which the crime was committed." In their letter No. 11 of 25th March 1878, the Visitors of the Dacca Asylum reported that the man "is now rational and fit to stand his trial." Under orders of the Local Government he was accordingly forwarded to Goalundo to be tried. He was acquitted on the ground of insanity, and readmitted to the Asylum under the orders of the Local Government, communicated in Judicial Department letter No. 2947, dated 19th July 1878. In their letter No. 111, dated 27th June 1885, the Visitors reported to the Local Government that they "are of opinion that he continues sane as reported in January last, and beg to draw attention to their recommendation that he be discharged." The Government ordered that he be employed in a jail as a work-overseer or servant on light labour. He left the Asylum accordingly.

The records of the criminal case have also been perused. They show that this man was charged with having, on 23rd April 1877, caused the death of his father, grandmother, brother, and three sisters. The Naib of the village gave evidence that after receiving the information from the prisoner, and seeing that the house was burnt down with the six dead bodies in it, he asked the prisoner why he had done this. "He said, 'I did it because I chose. What will they eat?'" I had heard that since prisoner's mother's death prisoner had been strange in his manner. He would not speak to people, but would sit still moping. On the day previous to this occurrence the father mentioned this fact to me. Up to the time of the mother's death the prisoner appeared to me perfectly sane and rational. I had heard that prisoner used to take both ganja and opium. His father several times told me of this. I do not know what prisoner meant by saying, 'what will they eat?' His family are in comfortable circumstances. I suppose prisoner meant that when his mother was gone who was to feed them; but I cannot tell." The next witness was a near neighbour, who said, "I knew Kailash well. He used to get drunk with ganja and opium. After his mother's death he became *pagal*, would not speak to any one, would laugh to himself, would not eat, and used to throw his

uttari (mourning garment) away. He did not take ganja during this time. * * I went to inquire about the *Shradh*. I saw Kailash seated in his *bari*. He would speak to no one. I told him not to be downcast and *pagal*; it was his duty to look after the younger members of his family. He was very fond of his mother." A third witness said, "I used to see Kailash frequently. On the evening of the occurrence, I saw the family. There was a commotion about the *Shradh*. Preparations were being made * *. After his mother's death, he used to speak to no one and to wander about and sometimes throw his *uttari* away. Before, he was all right. He had stopped taking opium, but took ganja."

Another witness, a priest, said, "Kailash is somewhat of a *pagal*. He has always been a bit of a *pagal*. Since his mother's death he has been mad. He did not do any of the acts which ought to be done by a person who has lost his mother. Every day I saw him after his mother's death and used to speak to him, but there was no knowing what he said. From his behaviour and acts I should say he had lost his reason. He had a wife. After her death (that was six or seven years before this occurrence) his strangeness increased. He was on the best terms with his family, with all of them. It is reported that prisoner used to smoke opium and ganja; but there is also a report that he gave it up." Two other witnesses corroborate this priest. One says, "Even before his mother's death Kailash was half-cracked. After his wife's death he was *pagal* for a month or so."

The prisoner in his examination said he had no recollection of the burning of his *bari* or of the death of his father and other relatives; that he recollected "something about his mother's death, but not fully," and that he used to take opium and ganja, but had given them up latterly.

The Civil Surgeon, Dr. Richards, gave evidence as to the prisoner's insanity. In answer to the Court, he said, "It is quite possible he may have become insane by smoking ganja; but there is nothing particular to show this."

The Sub-Inspector of Police showed that the prisoner came and gave information himself, that "he was trembling and in a most excited state, and loudly called out the information which he had to give." He was violent and struck the village Naib for not believing him. He had not been arrested by that time, but was simply walking with the Police and others whom he had called to the *bari*, and talking over the matter. The Sessions Judge in his judgment said, "It is proved that for years prisoner has been peculiar in his behaviour. After his wife's death he was quite mad for a month; and since his mother's death again he has been behaving like a man bereft of his reason. His behaviour before and immediately after the occurrence shows conclusively that he was not responsible for his actions." He accordingly acquitted the prisoner on the ground of insanity. The Judge did not refer to ganja at all as the cause of insanity, or as in any way connected with the crime.

105. Evidence of SURGEON-LIEUTENANT-COLONEL E. G. RUSSELL, Civil Surgeon, Darjeeling.

1. General observations and some experiments as to physiological effects.
2. Yes.
3. Kamrup, Assam. Fairly abundant.
4. Bhang.
5. None.
6. Scattered.
7. (a) (b) (c) None that I know of, except that in Rajshahi District—Abkari—under Government supervision.
- (d) None.
9. Only cultivated as noted at Question 7—under Government supervision. Methods well known.
11. I believe not.
12. No.
13. To Rajshahi District, I believe.
14. Ganja. Rajshahi District.
15. Methods of preparation of excise ganja obtainable from the officers employed locally.
- Preparations—
- (A). *Smoking*.—Ganja (cultivated) rubbed up with a little tobacco or rose leaves.
- (B). *Bhang* (wild plant).—Sweetmeat or confection—with sugar, ghee, flour, milk, musk, pepper; and sometimes opium, dhatura, or nuxvomica.
- (C). *Bhang*.—Decoction, with milk, sugar, pepper, etc.
16. (b) Yes.
- (c) No.
18. Ganja deteriorates; not much used after twelve months' keeping.
19. Both usually smoked. Ganja sometimes (rarely) drunk—pounded and mixed with sugar, rose leaves, etc., as infusion.
21. Flat as containing more active principle-charas.
23. Rarely, if ever, in Bengal.
26. (a) *Ganja-smokers*.—Men doing hard work under exposure, palki-men, etc.
- (c) On festive occasions, etc., in Bengal on Dasera or Bijoya Dasami, it is customary to give to visitors, friends, etc., bhang in infusion. Many use this only on such occasions of social festival.
28. (a) *Ganja*.—15 grains—cost one pice.
- Bhang*.—8 to 10 grains—cost half a pice.
29. (a) *With ganja*.—Tobacco.
- With bhang*.—Sugar, flour, milk, pepper, ghee.
- (b) *With bhang*.—In form of sweetmeat or of infusion—dhatura, opium, nuxvomica.
30. *Ganja*.—Usually in company, the pipe being passed round.
- Bhang*.—In company, on festivals—see question 26 (c).
- Male sex. No, children do not usually consume.
31. (c) Not much tendency. I have known persons who have smoked ganja for from fourteen to sixteen years who have never increased the quantities taken.
32. See question 26 (c) Temperate. Scarcely likely to lead to the formation of the habit.
33. Public opinion among the higher classes is against ordinary consumption.
34. Probably. To many of the classes who do hard work (physical) under exposure.
35. (b) Probably.
- (d) Probably.
- (f) Probably one or other.
38. None in kind. Flat ganja contains more charas and has, in consequence, more power.
39. Less injurious; in that it does not derange digestion, and is less open to deleterious admixtures.
41. (a) *Ganja*—Yes.
- (b) *Ganja*—Yes; is ordinarily used for this purpose.
- (c) *Ganja*—Yes.
- (d) Moderate use, while undergoing great physical exertion under exposure; by carriers of weights, coolies, palki and duli bearers, etc.
42. (1) Occasional moderate use of ganja harmless.
- (2) Habitual moderate use of ganja comparatively harmless. I have known men in good health and in full exercise of mental and physical faculties who have so used ganja for from fourteen to sixteen years.
43. *Of ganja*—Yes.
44. *Of ganja, smoked*—
- (a) *Mental*.—In from three to five minutes, sense of comfort; tiredness, pain, depression relieved; able to eat or to resume labour. After a few whiffs of the pipe the man is fit to start again refreshed. Very widely used for this purpose and to this extent.
- (b) Refreshing; removes the sense of exhaustion and depression after exertion or worry.
- (c) No.
- (d) Yes.
- (e) Yes; by removing feeling of exhaustion and depression; often used before the evening meal for this purpose.
- (f) One to two hours.
- (g) Scarcely; in moderate doses.
- (h) No.
45. *Of ganja*—
- (a) (b) Scarcely.
- (c) (d) (e) No.
- (f) I do not think that moderate use conduces to insanity.
46. Excessive use of ganja is reported as a cause of insanity in records of asylums in India. These cases are the most curable of those in the asylums. Mental troubles and want of mental

stability probably frequently precede its excessive use, and conduce largely to mental disease.

Excessive use of bhang is probably more deleterious.

47. No.

48. None.

49. (a) Perhaps, of bhang, when used with admixtures of nux-vomica or cantharides. The same may be said of these two drugs if the bhang be omitted.

(d) No.

50. (a) *Ganja*.—No.

(b) *Ganja*.—No.

54. *Bhang*.—Possibly.

Ganja.—Probably not.

55. *Bhang*.—Yes; can cause complete stupefaction, especially if dhatura or opium be mixed with it.

56. (a) *Bhang*.—With dhatura or opium, early stupefaction.

(b) With nux-vomica (koochla) or cantharides, possibly sexual excitement.

Ganja (smoked).—Not much open to such admixtures.

57. *Ganja*.—Rarely eaten or drunk. When so taken, effects are greater than when smoked, in proportion of (say) 2 to 1; and effects are more quickly induced.

Oral Evidence.

Question 1.—I have been twenty-two years in the service, of which twenty years have been in civil employ in Bengal and Assam. I have been in charge of the Bhowanipur *cum* Dullanda Asylum for some months during each of two consecutive years, amounting to about one year in all, for two years of the Patna Asylum, and for a short period of the Dacca Asylum.

Question 5.—By the answer here, I mean that I have no special knowledge; information would be of more value if obtained elsewhere.

Question 18.—I think that after twelve months the drug has materially deteriorated and that it is practically useless after twenty or twenty-four months. I find that the extract deteriorates rapidly. No drug in the Pharmacopœia deteriorates so rapidly. Only yesterday an experienced practitioner told me that he never trusted the drug in matters of health and life with his patients until he had tried its effect on himself: so rapidly does it deteriorate. The same is true of the excise *ganja*. I do not think I have any valuable information to give in explanation of this. Even with the greatest care you cannot, I think, prevent deterioration, as I know from the extract which I have had in my charge. I have no doubt that exposure to air and damp would greatly promote deterioration. But I think that the extract kept in closed vessels and under the most favourable conditions deteriorates. Anything that kept out completely both air and damp would tend greatly to retard deterioration. I cannot go further than that from my experience. Anything further would be mere interference or speculation.

Physiological experiment would, I think, enable one to judge whether the stuff was useless. I cannot speak with authority as to whether chemical analysis would throw light on this question. Mere inspection tells nothing. Without mildew or other visible sign, deterioration may have taken place.

Question 21.—Here I am not discussing *chur* but only comparing flat *ganja* and round as put into the pipe. In the commercial condition the two may be weight for weight the same with stem and everything attached. But it is only the flower head that is used by the smoker. I think more resin is bruised and shaken out in the rolling. That is my opinion. This is not based on experiment or analysis but merely on the statements of consumers. I would not set it against actual experiment as described in page 32 (Table X) of Dr. Prain's pamphlet. The whole of these remarks also applies to my answer No. 38.

Question 46.—I think that the use of bhang in excess is more deleterious than the use of *ganja* in excess. There is in the first place the very large quantity of bhang that would have to be used. There is also the fact that it is much easier to keep up a debauch with bhang than with *ganja*. Then I am speaking of bhang as usually taken. As it is taken internally it lends itself much more readily as a vehicle for admixture such as dhatura, etc. It is sometimes used with such admixtures when used to excess. I have no experience of the use of dhatura with *ganja*. I do not think that dhatura is ordinarily used with bhang. I do not think that the habitual consumer does often take it.

As far as my experiments go, the effect of bhang was scarcely perceptible. My remarks are not based on them, but are based on my views of the uses of ordinary life. I cannot say that the admixture of dhatura is common; but I cannot say how far it occurs.

Question 49.—I believe that hemp has no aphrodisiac effect. Cantharides and some other admixtures have. But they would have the same effect without the hemp. I believe the latter has none. I have naturally paid attention to this in my investigations, because of the common allegation. But I have found no such effect. Nor have I found any evidence to show that it produces impotence. I have no reason to believe that it does. I believe that excesses of any kind, as of alcohol or even of physical exercise, might have a tendency to produce a state of nerves resulting in impotence; but I do not believe that hemp has intrinsically any such effect.

I believe that there are persons who believe that the drug does produce aphrodisiac effects, but I believe prevailing opinion is against that, and I am of opinion that the facts are against it. I should say it may be possible that some have taken to the drug under this belief, but I believe that this is exceedingly rare. Dramatic and exaggerated statements have been too often based on such exceptional cases. Aphrodisiacs are in great demand. Any drug that has the repute of having aphrodisiac properties has, I understand from the chemists, a great run among the native population.

The notes * of experiments annexed to the paper of Mr. J. D. Anderson, Officiating Excise Commissioner of Assam, are copy of notes sent by me to Sir Charles Elliott in 1883.

I made a few subsequent and supplementary experiments of which I kept only brief notes which are embodied in the notes I gave Dr. Prain. The results were incorporated *verbatim* in Dr. Prain's report at pages 65 and 66. These two

* These are printed as an appendix to Dr. Russell's evidence.

papers contain an account of all that I have done in the way of experiment.

Prain, page 65.—I found that dried leaves had no marked diuretic effect. The diuresis was the most marked effect of the fresh leaves. This difference is due to the difference between the green and dried state. It is possible that it may be due to the loss of some volatile principle. I think that the diuretic effect of the fresh leaves is the reason of their being largely used by natives in fever. And I believe they are also on this account largely used for animals in order to produce diuresis in fever. For such use there would be necessary a supply of fresh leaves. I believe the dried leaf is used for other diseases of cattle.

Prain, page 65.—The infusion referred to in para. 1 of my notes in Dr. Prain's pamphlet was not quite a clear infusion. It was filtered through cloth. Some of the leafy matter passed through and was in suspension. It was not altogether clear.

Prain, page 66.—The effect on the pupils in my experiments was either contraction or fixation. The period of this varied, and was one of the principal signs by which I judged of the duration of the effects. My impression is that contraction is invariably produced, or fixation in case of excess. I have not come on any case of dilatation of the pupil in my experiments. As to outside life, other substances put in might produce it. I prefer to trust to the experiments where one knows precisely what is used. I have read Dr. Prain's account on pages 63 and 64 on cats where dilatation resulted.

Conjunctival redness is very common. If there are mental effects, I think it is exceedingly common. It follows the use of the drug smoked as ganja or drunk as bhang. It extends well beyond the mental symptoms. It extends certainly to hours, perhaps for days. The mental effects of a single large dose of bhang may last twelve hours, of ganja two to three hours. I do not think this conjunctival redness is confined to hemp. It would accompany excitement or intoxication produced by drugs or otherwise. It is not therefore a diagnostic mark of hemp drug insanity. It might be found in any condition of mental excitement, however produced.

Prain, page 66.—As to the frenzy produced by ganja, my statement as to this being the object in taking the drug by sanyasis is based on hearsay, on the statements of persons to whom I accorded credence. By frenzy I mean being lifted out of the cares and distractions of life, being "possessed of the deity," as it is sometimes classically termed. I never saw such frenzy produced in any of my experiments.

Prain, page 66.—As to insanity being attributed

to ganja, I used the term "attributed" and "recorded" advisedly, because I think the records require further inquiry. The persons who report on the cause are not specially qualified. A man's hand is examined for a ganja mark, or some such evidence is got hold of; and an opinion is given as to cause sometimes rashly as cause has to be assigned. I distrust the ultimate source of our information as to history.

Having this feeling I have made in some cases further inquiry into the causes of insanity of persons in the Patna Asylum while I was Superintendent. In many cases nothing resulted; it was extremely difficult to get information. In some I found a previous want of mental equilibrium, so that ganja was not the prime cause. The prime cause was this previous weakness. Others I am satisfied were purely ganja cases. These further inquiries were made in 1891 and not with reference to the present inquiry. They were made in Patna and were wholly beyond the Asylum records. I do not remember precisely what motive set me to work. I think it was the large number of cases attributed to ganja, and the absence of some other causes which usually produce insanity. My inquiry led to the elimination of certain cases as clearly not primarily due to ganja, but to some antecedent mental feebleness which either with or without the use of ganja might have eventually resulted in insanity. There were some also attributed to domestic troubles or the ordinary troubles with the money-lender. But I do not wish too much importance to be attached to the details of my inquiries, because they were not intended to elucidate the question of the connection of ganja and insanity scientifically, but generally to satisfy my own mind.

I have had cases of both acute and chronic insanity attributed to hemp drugs. I never diagnosed the cause. I could not at the time of admission go beyond the papers. Any further information could only come later. Sometimes too subsequent information might be got from a recovered lunatic or his friends. The determination of the cause wholly depends on the history, whether the original history or supplementary information. I could not determine cause from symptoms. Symptoms would enable me to diagnose the type of the insanity, but not to determine its cause: not to determine whether the insanity was toxic or not. There are no special symptoms of insanity attributed to hemp drugs in the acute form, nor in the chronic stage.

One thing I may say that I believe that cases due to hemp drugs, or rather cases of toxic insanity generally, are as a rule found to be more curable than other cases.

APPENDIX.

Note by SURGEON-MAJOR RUSSELL, *Civil Surgeon of Gauhati, on Ganja and Bhang.*

CANNABIS INDICA.

Indian Hemp.

Bhang,	}	versus	{	Ganja,
wild plant.				cultivated plant.

GENERAL NOTES DERIVED OTHERWISE THAN BY EXPERIMENT.

1. Difficulty of comparing relative strength—

Ganja—Consists of the dried flowering tops (only) of the female plant, *i.e.*, the small leaves (bracts) near the flowers, the flower, and fruit.

These parts contain a brown resin in which the active principle seems to reside. The large leaves and stems are not used.

Bhang.—Both mature plants and the young

immature (*i.e.*, not arrived at flowering stage) plants used. All parts of the plant, except large stems, used, not merely flowering tops of female plants.

2. Influence of maturity and flowering stage. Compare directions for gathering plants used in medicine.

(a) *General directions*.—Herbs and leaves should be gathered after flowers have blown, and before fruit ripens.

(Garrod—*Materia Medica*, 8th edition, 1880, page 179.)

(b) *Conii folia* (Henbane).—Gathered when two-thirds flowers have expanded.

(c) *Aconiti folia*.—Leaves and flowering tops, gathered when about one-third of the flowers have expanded.

(d) *Hyoscyami folia* (Hemlock).—Gathered when two-thirds of the flowers are expanded.

(e) *Belladonna folia*.—Gathered when fruit has begun to form.

Conclusion.—In comparing ganja and bhang their relative strength can only be determined by testing similar parts of the plants at a similar stage of their existence.

During flowering.—Plants innocuous at other times, may secrete poisonous properties: *e.g.*, parsnip root (*Petroselinum sativa*) sometimes does this (Balfour, Botany, page 508).

3. NOTE.—*Cultivated versus wild plants, generally*.—Compare those used for active principles in medicine:—

(a) Cultivated or wild indifferently, *cateris paribus*.

Belladonna folia.—Leaves from wild or cultivated used (Garrod—*Materia Medica*, page 319).

Hyoscyami folia.—ditto ditto (*idem*).

(b) Wild plant only used—

Conii folia ... (Henbane.) } in medicine.

Digitalis folia ... (Fox glove.) }

(c) Cultivated plant, only used—

Aconiti folia ... In medicine.

Conclusion.—Little to be argued from general analogy.

4. NOTE.—ANALOGY OF HEMP AND HOP.

Cannabinae.—Natural order.—Hemp and Hop family.

In the Hop the female *strobili* (flowering heads or cones) contain the active principle in a resin secreted round the scales. Leaves inactive.

In cultivated Indian hemp (ganja) active principle chiefly in female flowering tops. These alone sold and used in medicine.

Wild Indian hemp.—Analogy suggests a similar arrangement of active principle, and that leaves of immature plants should be almost innocuous.

5. NOTE.—*Opium eating and ganja consuming*.—It is very common to find the same person habitually consume both opium and ganja.

Persons who begin primarily as opium consumers commonly diverge also to ganja.

Persons who begin primarily as ganja consumers do not so commonly diverge to opium.

6. Methods of using ganja and bhang:—

(a) *Smoking ganja*.—Both ganja and bhang are kneaded up with tobacco, and smoked, with or without addition of spices.

Ganja is commonly so used; bhang rarely.

(b) *Drinking, or eating*.—Ganja is usually prepared as majum.

Preparation.—The ganja is steeped in water (cold or hot) for 24 hours, filtered, and the fluid mixed in sweetmeats. This is usually done by professional sweetmeat makers. The consumer orders these to be made strong or weak according to inclination:—

Weak, say, 20 grains per man.

Strong, say, 40 to 60 grains per man.

Bhang prepared as goonta.

Preparation.—Some fresh or dried leaves are pounded up and washed well in cold water. This washing continued for ten minutes; the resulting fluid filtered through thin cloth. The matter left on the cloth again washed in water and filtered; process repeated four or five times. Black pepper (equal to half or whole weight of the bhang used) added; also some sweet matter, as gur, sugar, etc. This fluid is well frothed up, and drunk on subsidence of the froth.

The fluid is a turbid, bilious-green liquid, of sweet, mawkish taste, of smell like bay.

Thus *goonta* (bhanga) is a rapidly improvised drink; *majum* is a more formal preparation.

7. *Time in which effect produced*—

(a) *Smoked*.—Ganja produces effects almost immediately; *Bhang* more slowly.

(b) *Eaten, or drunk*—

Majum (ganja): effects come on in half an hour or so.

Goonta (bhanga): effects come on only after three or four hours.

8. *Duration of effects*—

Ganja, in small doses, or in persons habituated to it: the effects last about three or four hours. During a debauch, a person desirous to continue under its influence repeats his dose every three or four hours.

In large or repeated doses, or in persons not accustomed to it, effects may last three to five or six days. Cases are related of permanent mental derangement following excessive doses.

Bhang.—Effects rarely last more than from four to twelve hours, however large the dose.

Notes on *Cannabis Indica* (Indian Hemp)

Cultivated, } *versus* { Wild plant,
i.e., ganja. } *i.e.*, bhang.

Experiments by E. G. RUSSELL, GAUHATI,
March 1883.

EXPLANATIONS.

1. In these notes—

Ganja = Flowering tops of female plant of cultivated Indian hemp.

Bhang = Leaves of wild Indian hemp.

Majum = Fluid preparation of ganja.

Goonta = Fluid preparation of bhang.

2. Two men were experimented on, Dhanoo, and Bihoo. Both men were habitual users of opium and of ganja. Both had been deprived of use of these drugs for a certain period preceding the time of experiment, viz. :—

Dhanoo for seven months,	} i.e., { since their admission into jail.
Bihoo for eighteen days,	

3. General condition of the subjects :—

Dhanoo says he has taken opium and ganja for last fifteen years. Is *et.* 38, of robust physique, active and intelligent.

Bihoo has taken opium, in moderation, for 7½ years, and ganja for five years, with intervals of abstinence. Fairly strong and muscular; fairly active and intelligent.

ABSTRACT OF NINE EXPERIMENTS.

I.—DHANOO SERIES ... { A.—By smoking.
B.—Taken into stomach; drunk.

A.—SMOKED—

Experiment 1—

Ganja, 30 grains.—Heart from 88 beats per minute to 120=32 increase. Sounds, less firm and clear.

Pupils.—Some contraction induced; conjunctivæ red.

Mental.—None.

Experiment 2—

Ganja, 90 grains.—Heart from 88 to 134=46 increase. Sounds, less firm and clear.

Pupils.—Contraction induced; conjunctivæ red.

Mental.—Giddy; can walk straight, but balances on one foot with difficulty. Voice rather thick and muffled. Ideas clear. Looks fuddled. Says he feels strong and fit.

Effects nearly disappeared in four hours.

Experiment 3—

Bhang.—(Leaves of plants, 2 to 3 feet high, used; mature, but not flowering).

60 grains.—No changes observable.

180 grains.—Heart from 88 to 90=2 faster.

Pupils.—No effect.

Mental.—None.

Diuretic effect marked.

B.—DRUNK—

Experiment 4—

Bhang.—(Leaves of plant, 1 foot high, immature, prepared as goonta, and drunk.)

60 grains.—No effect, except diuretic (increased secretion of pale urine).

Experiment 5.—

Bhang.—(Leaves of mature plant, 3 feet high, not flowering, prepared as goonta, and drunk).

120 grains.—Heart from 88 to 98=10 increase.

Pupils.—No change.

Mental.—Slight giddiness; can easily balance on one foot.

Effects slight; came on slowly; recovered from in three hours.

Experiment 6—

Ganja.—(Prepared as majum.)

30 grains.—Heart from 88 to 106=18 increase.

Pupils.—Slight contraction; conjunctivæ slightly red.

Mental.—Giddy; slightly fuddled.

Voice somewhat thick.

Balances on one foot with difficulty.

Effects lasted 3½ hours.

Experiment 7—

Ganja.—(Prepared as majum.)

60 grains.—Heart from 88 to 130=42 increase; irregular and indistinct.

Pupils.—Considerable contraction; conjunctivæ very red.

Mental.—Talkative, excited; then drowsy.

Walks unsteadily; cannot balance on one foot.

Voice thick; appearance fuddled.

Effects lasted beyond five hours.

II.—BIHOO SERIES—

Experiment 8—

Ganja.—Smoked.

60 grains.—Heart, from 75 to 108, = 33 increase; irregular.

Pupils.—Contraction induced; conjunctivæ red.

Mental.—Excited, talkative, voice thick, giddy; can walk straight; cannot balance on one foot; tipsy look, eyelids drooping.

Effects disappeared in three hours.

Experiment 9—

Bhang Smoked (Leaves of plants, 2 to 3 feet high, mature, not flowering.)

240 grains (½ ounce).—Heart from 76 to 94=18 increase; slightly irregular.

Pupils.—Slight contraction.

Mental.—None marked; slight giddiness; can balance on one leg easily.

Diuresis marked.

DEDUCTIONS.

(1) *Bhang.*—The young immature plants have practically no intoxicant powers, but are diuretic.

(2) *Bhang.*—Mature, full grown plants (but not at period of flowering) from 2 to 3 feet high, have some intoxicant powers when taken internally, but practically none when smoked. Speaking roughly, I should say, as intoxicants :—

Ganja : { Leaves of } :: 10 : 1.
 { *Bhang* (mature) }

(3) *Bhang.*—Flowering tops of female plants not tested, as they were not procurable at period of experiment (March).

Bhang is rarely, if ever, smoked. Is drunk as a fluid preparation, viz., goonta.

Note.—So far the flowering tops of ganja have been compared with leaves of bhang gathered when plant not flowering.

Ordinary leaves are not left on the ganja prepared for sale, and no female flowering tops of bhang were procurable at season of experiment.

Weights referred to—

1 tola=185 grains =1 rupee weight.

=(say, roughly) =180 grains.

=3 drams.

(8 drams=1 ounce).

In testing ganja and bhang, similar parts undersimilar conditions should be compared, *i.e.*, female flowering tops of each.

- (4) As to intoxicant effects of ganja smoked compared with ganja drunk (as a fluid preparation), I should say, smoked : drunk :: 1 : 2 roughly. Maximum intensity of effect more quickly reached when ganja drunk.

DETAILS OF EXPERIMENTS.

DHANOO.—One of the men experimented on, *at.* 38 or so, healthy, muscular, intelligent.

Has used opium and ganja for about fifteen years.

Opium.—Used to eat about 45 grains (four annas) in early morning, and smoke ganja about three hours after that. Says he used to work well while consuming these. Says they used to make him feel stronger, kept him warm, and from feeling fatigue. Sometimes made him sleepy ; never incapable of work.

Ganja.—Used to smoke 180 grains during 24 hours (if he could afford it), in four or five instalments.

For last seven months, while in jail, had no opium or ganja.

On all days of experiment Dhanoo had breakfasted between 11 and 11-30 A.M.

Experiment 1 ; on 3rd March, 1883—

Effects.

Ganja, 30 grains.	} <i>Before.</i> —Heart 88 ; firm, clear.
Country tobacco, 10 grains.	
Smoked in chillum.	
Began . . . 2-45 P.M.	
Finished . . . 2-56 P.M.	} <i>After i.e., at 3 P.M.,</i> —heart 120 ; less firm.
	} <i>Pupils.</i> —Some contraction induced.
	} Mental effects, none.

Experiment 2 ; on 4th March, 1883—

Dhanoo, who had breakfasted at 11 A. M. smoked in ■ chillum :

Ganja 90 grains + tobacco 15 grains.

One-third of this smoked at a time.

1st part.—Began at 2-20 P.M.

Finished at 2-30 P.M.

Before.—Heart 88 ; firm, steady—Pupils normal.

After.—Heart 118 Pupils some contraction induced.

2nd part.—Began 2-36.

Finished 2-48.

After.—Heart 132 ; sounds are not clear ; muffled, especially first sound.

Says he feels strong, fit for work, and happy. Mental effects slight, can talk as much as before ; says he feels giddy ; can balance on one foot. Pupils further contracted.

3rd part.—Began 3-24.

Finished 3-30.

After.—Heart 134 ; irregular, not firm.

Pupils, very contracted ; do not respond easily.

Looks tipsy ; conjunctivæ red ; voice thick, muffled ; says he feels strong and fit for work.

Mental.—Giddy ; can walk straight, but not balance on one leg. Ideas clear ; sits leaning head against support.

Giddiness increased during the half hour following the completion of this last pipe.

6-30 P.M.—Symptoms almost disappeared.

Experiment 3—

Bhang leaves, three weeks old, dry, of plants 2 to 3 feet high, mature, not flowering.

Dhanoo smoked (on 5th March 1883) 180 grains.

1st part.—Bhang 60 grains + tobacco 6 grains in chillum.

Began to smoke 1-18 P. M.

Finished 1-45 P. M.

Before.—Heart 88 ; firm, clear. Pupils normal.

After.—No alteration of any kind observable, except diuretic effect. He retires twice to empty bladder of an unusual amount of clear urine.

He says it is unpleasant to smoke and gives heartburn. Would rather drink it. Has never smoked bhang before.

2nd part.—Bhang 120 grains more=180 grains in all + tobacco 5 grains, smoked in chillum.

Began this 2-10 P.M.

Finished 3-5 P.M.

After.—Heart 90 ; firm, clear. Pupils as before.

Mental symptoms, none.

Diuretic effect, marked.

Retired three times, up to 5 P.M., when observation ceased.

Experiment 4 ; on 6th March, 1883—

Bhang drunk, as goonta, from leaves of young immature plants 1 foot high.

Preparation .	{	Dried bhang leaves	1 dram.
		Sugar	1 dram.
		Black pepper	12 berries.
		Water	12 ounces.

Leaves, pepper and sugar well beaten up together with ■ little water ; more water added ; filtered through cloth ; process repeated with residue, thrice.

Resulting fluid, thick bilious green ; taste sweet, mawkish ; smell like hay.

Well frothed up, then drunk.

Effects none, except diuretic.

Experiment 5 ; on 9th March, 1883—

Bhang.—Leaves of mature plants, 2 to 3 feet high, not flowering ; leaves about three weeks old, dry.

Prepared as in Experiment IV ; ■ drams made into 12 ounces of goonta.

Dhanoo drunk this at 11-50 A. M.

Before.—Heart 88 ; strong, clear. Pupils normal.

Effects.—1 P. M.—Heart 98 ; slight giddiness ; can stand on one foot.

2 P.M.—Same.

3 P.M.—Same.

4 P.M.—Heart 90 ; firm, clear.

Very slight effects. Disappeared in three hours. Effects came on slowly.

*Experiment 6; on 10th March, 1883—**Ganja, as majum.*

Preparation—The flowering tops soaked 24 hours in water; then well bruised up in mortar with water for ten minutes. Both infusions mixed and filtered through cloth; black pepper and sugar added.

Ganja 30 grains, thus prepared, taken at 1-30 P.M.

Before—Heart 88; clear, regular.

Effects—

2-30 P. M.—Heart 96; less clear. Pupils some contraction induced. Mental effects coming on.

3-30 P.M.—Heart 106. Pupils as at 2-30.

Mental effects—Voice thick; conjunctivæ somewhat red; complains of giddiness; can balance on one foot with difficulty; looks heavy and fuddled.

5-30.—Effects subsided, nearly. Heart 94; effects lasted about 3½ hours.

*Experiment 7; on 12th March, 1883.**Ganja, as majum.*

Ganja, 60 grains; prepared as in Experiment 6; drunk as 12 ounces of fluid, at 1-30 P.M.

Before.—Heart 88; firm, slow.

Effects.—2-30 P. M., heart 130; irregular. Pupils, contraction induced

Mental—Very giddy; cannot walk straight, reels; cannot balance on one foot; voice thick, heavy; conjunctivæ very red. Excited and talkative; appearance tipsy.

3-30 P. M.—Heart, same. Pupils, increased contraction. Less excited; drowsy.

4-30 P. M.—Heart 98; firmer; recovering, sleepy; voice, more natural.

6-30 P. M.—Effects nearly subsided.

Effects lasted about five hours.

Note—Symptoms in this case came on very rapidly, and ran quickly to maximum intensity.

Experiments 8 and 9 were on one Bihoo.

Bihoo.—Man, *æt.* 33, fairly muscular and intelligent. Habituated to use opium and ganja.

Opium—Has eaten since five years 40 grains a day, half in early morning, half in evening, when he could afford it.

Ganja.—Has smoked habitually for 7½ years twice or more daily; at each time, from 20 to 45 grains, according to state of his funds.

Experiment 8; on 5th March 1883—

Ganja.—60 grains + tobacco 6 grains.

Before smoking.—Heart 75; slow, strong.

2-45 P. M. began to smoke.

3-20 P. M. finished.

Effects.—Heart 108: first sound not clear or firm.

Conjunctivæ red.

General.—Looks tipsy; eyelids drooping; voice thick.

Mental—Giddy; cannot balance on one leg; disposed to be merry.

5-30 P. M.—Effects subsiding.

6-30 P. M.—Effects subsided.

Effects came on rather slowly, and lasted about three hours.

Experiment 9, on 6th March, 1883—

Bhang.—Leaves three weeks old, dry, of plants from 2 to 3 feet high, mature, not in flower.

240 grains (=½ ounce) + tobacco 12 grains,

Smoked by four instalments.

Before.—Heart 76; slow, firm.

Began to smoke, 1 P. M.

Finished, 2-40 P. M.

Effects.—Heart 94; sound, not clear.

Pupils.—Slightly contracted.

Diuretic.—Effects marked.

Mental.—None marked; slight giddiness; can balance easily on one leg.

106. Evidence of SURGEON-LIEUTENANT-COLONEL J. M. ZORAB, Civil Surgeon and Superintendent, Lunatic Asylum, Cuttack.

Oral evidence.

I have been Superintendent of the Lunatic Asylum at Cuttack since November 1891. It is my first charge of an asylum. I have not made insanity a special study, and have no special experience regarding it beyond the charge of this asylum.

The general register gives the names of all lunatics received and all the particulars required for filling up the annual statements. It is filled up by the overseer in his own handwriting. He obtains his items from the descriptive roll and papers sent in with the lunatic. He makes the entry at once, simply copying what these papers contain. These entries are never afterwards altered unless mistakes in copying are discovered. If the cause is entered as "unknown," I make no subsequent inquiry to ascertain the cause. The entry regarding cause would always remain as made in the papers. I should never alter it, because I do not think I have the material for deciding as to cause. Statements VI and VII of the Annual Returns are both prepared from this register without any reference to facts which

may have transpired during the man's detention. Of course if the type had not been diagnosed, the type would be entered when diagnosis was made. No other change would be made. Cause would never be altered.

The returns therefore depend on the papers as they come in. I do not think that the papers are absolutely reliable in regard to cause, as they depend in most cases on previous police inquiries. But they are the best information we can get. We cannot get away to make personal inquiries, and have to be satisfied with the papers. I have never seen any friends accompanying the lunatic. Sometimes friends come to visit patients; but I have never asked them about cause. We accept the papers. We never try to sift the papers. I form my own opinion as to cause from the symptoms, but that leads to no alteration on the papers. In hemp cases there are no diagnostic symptoms after the active period of the intoxication (including the subsequent dejection) is over. These symptoms are never seen in the asylum. I have never seen them. There are no diagnostic symptoms of hemp drug insanity so far as I know.

107. *Evidence of* SURGEON-LIEUTENANT-COLONEL RUSSICK LALL DUTT,* *Officiating Civil Surgeon, 24-Parganas.*

1. Personal observation and experiments and intercourse with persons addicted to hemp habits in Bengal.

2. These definitions are accepted by all. The names used, *i. e.*, siddhi, charas, and ganja, are the local names in Bengal.

19. As far as I know, ganja and charas are only used for smoking. Cases are mentioned where charas has been used for criminal purposes, but no such cases had come under my observation in the course of twenty-two years' service in Bengal.

23. I have never seen bhang used for smoking.

28. Answers under respective heads,

Ganja.	Charas.	Bhang or siddhi.
(a) { 60 to 180 grs. = $\frac{1}{2}$ tola to 1 tola. }	30 to 120 grs.	180 to 360 grs.
(b) Varies. 180 to 540 grs.	120 to 360	360 to 1,440 grs.

I cannot give the average cost of these drugs, having no knowledge of the market prices.

29. Ganja and charas are ordinarily mixed with dried tobacco. The two drugs are rubbed together with a few drops of water in the palm of the left hand, which in ganja smokers leaves a characteristic brownish black stain, affording a means for detection. This mixture is smoked in pipes. Siddhi or bhang is used in the form of cold infusion in water generally, mixed with black pepper, cucumber, or melon seeds. Hindustanis take it in this form. Muhammadans and Bengalis add milk and sugar and rose water occasionally. Dhatura is not infrequently mixed to enhance its intoxicating properties. Siddhi or bhang is used also in the form of majum or sweetmeat with sugar, milk, and rose water. Dhatura is often added, especially by those who resort to crimes with its help. Nux-vomica is added to siddhi by Indian kabirajes or hakims mainly to obtain its aphrodisiac properties. I have never heard of cantharides being used in Bengal, though opium might be used.

30. Beginners smoke ganja or charas in solitude, often with one or two boon-companions. Confirmed habituals generally resort to shops where they find company. Rich people consume it at home with a few of their companions. Siddhi is seldom used habitually by Bengalis. It is used habitually by Hindustanis, especially the Darwan class. The use of these drugs is very limited in Bengal. A few of the lower classes use it. I have seldom seen children consume them, except in cases where the parents are habitual consumers. Men use the drugs, and not infrequently women of loose morals. Young men between the ages of 15 to 20 begin its use; seldom grown-up adults.

31. It is easy to get into the habit of taking these drugs. There is an invariable tendency for the habit to become excessive, and it is difficult to break off the habit, especially in the case of ganja smoking.

32. On the last day of the Durga Puja, called the Dasami day, it is a social custom to consume the watery infusion of siddhi both among Hindu men and women in Bengal. It is not essential on religious grounds, and it is generally very temperate, and does not in the majority of cases lead

to the formation of the habit. Latterly it has become the fashion among the men to substitute brandy for it. During the Holi festival all the three drugs are consumed in excess by Hindustanis; and as the festival lasts for some days, there is every reason to apprehend that the consumption may lead to the habitual use of these drugs.

In my younger days I often observed inferior brands of brandy and rum substituted for hemp, siddhi, and ganja. Drunkenness prevailed among the English-educated people to a very considerable extent, due to religious indifference resulting from a secular education, and to the imitation of European habits. That there was excessive consumption of strong waters and meat among the Europeans which the natives followed will be shown by a reference to the reports and works of Drs. C. N. Macnamara and Norman Chevers. The imports of foreign spirits will support the statement I make. Within the last ten to twelve years there has been a reaction against the use of spirits, both among Europeans and natives, due to totally different causes; for while the Europeans consumed less from a knowledge of its deleterious effects in the tropics, the native in addition has been influenced by the revival of Hinduism, Brahmanism, and a purer form of Muhammadanism. Drunkenness still makes sad havoc among Native Christians and certain classes of Hindus. One proof of the abatement or decrease of drunkenness is the lessened prevalence of liver affections and liver abscess at the present time.

37. There is hardly much difference in the effects following the smoking of charas or ganja. Charas is burnt slowly, and takes a little more time for intoxication than ganja. Practically, however, the intoxication follows almost instantaneously after a long pull or draught. In the case of siddhi taken as a watery infusion intoxication ensues in about half an hour, and is of a more cheerful character than in the other varieties, which from their concentration produce stupefaction and languor or laziness.

39. The smoking of these preparations affects the nervous system directly, and is hence more injurious than eating or drinking. In the latter case the drug is slowly introduced through the digestive system, and exerts its effects slowly. Smoking is more deleterious to the nervous system, and gives rise to emaciation and other well-known symptoms, including insanity, sooner than drinking or eating the same drugs. Here, of course, I take the quantity to be equal both for smoking or drinking or eating purposes.

40. Kabirajes and hakims use the drugs extensively in the treatment of human diseases. I know nothing of its use in cattle diseases.

41. Medicinal use is admissible only.

(a), (b), (c). No.

As an intoxicant it can hardly be said to be beneficial.

42. Its use is always harmful, as it tends to increased consumption.

44. In habitual consumers it at first relieves the craving, calms the nervous system, and produces a mild inebriation of a cheerful kind, pro-

* Was summoned to attend at a meeting of the Commission for oral examination, but was unable to appear.

moting mirth in merry makers, or concentration of the mind in religious devotees. It seldom produces the boisterous hilarity of alcoholism. It creates an appetite, and the inebriation lasts for three hours or so, followed by sleep. No after-effects are noticeable, but considerable uneasiness and discomfort follow the delay or the want in the supply of the customary drug.

45. As I previously observed, the habitual use of these drugs tends in most cases to excess. I have, however, seen several instances in hard-working and active men, where very moderate smoking of ganja or charas or moderate drinking of siddhi in infusion do not produce any appreciable effects. Among singers in Bengal, artisans, and mill workmen moderate habit entails no immediately injurious effects, but these moderate cases are seldom long lived. There is in them a slow and insidious undermining process going on in their digestive, respiratory, and nervous systems, which predispose them to acute diseases and cut their lives short. Among these moderate users weak intellect and a dull moral sense are invariably seen. When imperceptibly moderation is exceeded, then symptoms of impairment of the constitution, digestion, and nervous system manifest themselves to the skilled observer.

By habitual moderate use I understand a couple of smokes a day, or a tola of siddhi in infusion. Individual instances of slight impairment of body and mind I have seen, but I did not record.

46. The use of these drugs tends to excess as previously observed. The effects of siddhi drinking are slow, but ultimately merge into those arising from ganja or charas smoking. The smoker of ganja or charas is known by his appearance and habits. He is generally emaciated,

and walks slowly by the less frequented paths and parts of roads. He is generally taciturn, inoffensive, or skulking in his habits. His face has a sunken appearance, and his eyes are often blood-shot, especially after a smoke, with dilated pupils. Physically, he becomes a ruin; morally, depraved; and mentally inane or insane. Excessive ganja or charas smoking results generally in two series of disorders. In the young and nervous individuals acute mania, followed by dementia. In the confirmed old habituals there is gradual deterioration of body and mind, great emaciation, nervous disorders, great timidity, followed by impaired digestion, and, finally, an inveterate form of dysentery, cirrhosis of lung and liver. Ganja is a prolific source of insanity, curable in the young, but incurable in the old.

47 and 48. Not a hereditary habit, but if children associate with parents habituated in such drugs, they get into the habit.

49. These drugs are feeble aphrodisiacs, and are often used by immoral men and women as well as the upper classes of Muhammadans and Hindus, who from abuse lose their sexual powers. Medicinally it is not injurious, and as such it is generally used. Excessive habitual use causes impotence. I have seen in more than a dozen instances.

50. The results of excessive use have been previously discussed.

56. I have noted that dhatura enhances the narcotic effects of the different preparations of hemp, so does opium; nux-vomica increases their aphrodisiac property, and betelnut, containing a volatile narcotic, behaves like dhatura or opium, but to a very limited extent.

57. I have not seen any instances.

108. Evidence of SURGEON-LIEUTENANT-COLONEL G. PRICE, Civil Surgeon, Burdwan.

1. During twenty-one years' service in India have frequently come across consumers of hemp drugs, and have conversed with them and with intelligent natives on the subject.

2. Yes. Bhang or siddhi, ganja, and charas.

19. Ganja is sometimes eaten mixed with betelnut. This is generally done by excessive smokers when they find that their pipe or two of ganja previously smoked has not produced sufficient effect. The eating of it increases and prolongs the effect.

23. I have been told by a Native Doctor that bhang is sometimes smoked by beginners, because it is considerably milder than ganja. Other intelligent natives with whom I have talked on the subject, all say that it is never smoked. It certainly cannot be a common practice in Lower Bengal.

28.

	GANJA.		CHARAS.		BHANG.	
	Amount.	Cost.	Amount.	Cost.	Amount.	Cost.
(a) Habitual moderate consumers.	1 vori.	1 anna.	$\frac{1}{2}$ vori.	1 pice.	$\frac{1}{2}$ vori.	1 pice.
(b) Habitual excessive consumers.	2 voris.	8 annas.	$\frac{1}{10}$ vori.	1 anna.	2½ voris.	1 anna.

Vori nearly equals a tola in weight.

29. Dry tobacco is ordinarily mixed with ganja when smoked, and betelnut when eaten. Moist tobacco is mixed with charas when smoked. Bhang, when drunk, is usually prepared with sugar and water, occasionally with bhang massala. The object of the admixture is to make them more tasty.

Bhang massala contains:—

Cucumber seeds, kharmuja seeds, rose petals, black pepper, aniseed.

Although bhang is usually drunk, it is sometimes eaten, mixed with sweetmeats, when it is called majum.

30. All are consumed, if possible, in company, otherwise in solitude. It is mainly confined to the male sex.

It is not usual for children below ten or twelve years to consume any of these drugs.

31. Yes; the habit is easily formed. It is difficult to break off. There is a tendency for the moderate habit to develop into the excessive.

32. During the Dassara festival in the Durga Puja holidays, it is customary for friends collected together to drink bhang, and it is considered essential at this religious gathering. Those who are not in the habit of consuming it regularly or occasionally merely dip their finger in the solution and put it on their tongue, unless they feel inclined to try its effects for the first time, when they take it in moderate quantities. The tendency at this festival is to take it in larger

quantities than usual. It is no doubt likely to lead to the formation of the habit.

36. No, I have not heard that such is the case. I have heard of cases, where men formerly in the habit of consuming bazar liquor, have taken to the smoking of ganja, owing to the removal of distilleries from their neighbourhood, and the consequent rise in the price of bazar liquor.

37. The only difference in the effects of charas smoking and ganja smoking is that the former produces headache and the latter does not.

The drinking of bhang differs in its effects from both, it produces hilarious intoxication, coming on in quarter to half an hour and lasting eight or twelve to twenty-four hours, whereas the effects of the smoking of ganja or charas are almost immediate, lasting two to three hours, and do not produce the same good-humoured hilarity, but rather more excitement and intoxication of a less pleasing description.

40. Bhang is prescribed by some for bowel and chest complaints. I do not know of any being used in the treatment of cattle disease.

41. (b) The smoking of ganja does give staying power under severe exertion. Babu Lolit Mohun Rai tells me of a chaprassi of his, who, after a couple of pipes of ganja, can run the whole distance between Burdwan and Chogdighee (twenty-five miles) in an unusually short time.

42. I do not look upon the use of any of these drugs as harmless. I think the tendency is for the habit once commenced to become excessive and harmful.

44. They are all refreshing, produce intoxication, do not allay hunger, but on the contrary increase the appetite. The effects of ganja and charas last about two to three hours, but those of bhang last much longer—eight to twelve or twenty-four hours. The after-effects of all are more or less depression and lassitude, with headache in the case of charas. The want of subsequent gratification after the habit is formed, does produce longing and uneasiness.

47 and 48. No; I have never heard of any such cases. But ganja smokers sometimes teach their children, when they grow up, the use of the drug.

49. Not usually either by prostitutes or others. When ganja is smoked to excess, impotence results often in eight to ten years.

56. I have never heard of the admixture of dhatura, nux-vomica, cantharides or opium with hemp drugs. When ganja is eaten mixed with betel-nut, I am not aware of the latter producing any modification of the action of the hemp drug.

Conclusion.—Regarding the well known loss of memory caused by the habitual smoking of ganja, there is a Bengali proverb:—"Ganja khaley baper nam bhuley jai." He who smokes ganja forgets even his own father's name.

Regarding the difference between the results of bhang and ganja, there is another proverb:—Siddhi khaley budhi barey, ganja khaley Lukhy charey. The man who drinks bhang thrives, he who takes ganja goes to the bad (is deserted by the Goddess Lukhi).

109. *Evidence* of SURGEON-LIEUTENANT-COLONEL E. BOVILL, Officiating Civil Surgeon of Patna and Superintendent, Lunatic Asylum.*

1. I have been in the medical service in India since 1878, and have been in charge of several native regiments, civil stations, and three lunatic asylums.

2. I consider that the definitions given by Dr. Prain are correct. The ganja I have most frequently seen is the flat ganja. I have always heard the different forms in which the plant or its products are used spoken of as bhang, ganja, and charas.

In explanation of replies to Chapters V and VI, it is right to state that the information is hearsay, and not based on experience. It appears impossible to extract actual facts from the class of natives who use these substances. One potent factor in their disinclination to speak freely on this subject is the opinion generally received among natives that hemp preparations (ganja and charas) have an aphrodisiac effect, and this aspect of the question prevents their speaking openly.

There is, in my experience, greater difficulty in extracting correct statements from natives about ganja, than about either opium or alcohol. For instance, one patient in the lunatic asylum who told me that he used to smoke twenty pipes a day went outside the office and said he smoked many more, his subsequent statements being conveyed to me by one of the warders. In the same way men who are known to smoke ganja profess to be ignorant of how much they put in a pipe. As an example of the difficulty of making observations

on this subject, I may state that in over twenty years' practice in India I have never seen or treated a case of poisoning caused by hemp or its preparations, nor do I know any other medical man who has. Amongst the many patients sent to the asylums under my charge whose insanity is stated to be due to ganja or bhang, I have never seen one admitted who was actually suffering from the recent toxic effects of these drugs; nor do I remember to have seen a prisoner admitted to the jail in a condition of intoxication due to hemp. The jailor, who has sixteen years' service in the department, states that he has never received a prisoner into jail who was insensible or incapable of conducting himself properly from the recent effects of hemp drugs.

19. It is stated that no charas is sold in Patna. If used, it is brought for private use. Ganja is generally used for smoking.

20. Bhagats and sadhus, and those who consort with them, all smoke ganja. I cannot state what proportion or what classes use charas. It is known, but appears to be very uncommon. It has been stated to me that Muhammadans use charas more than Hindus, the latter objecting to it because it is collected on hides.

21. Flat ganja is preferred: one smoker says it is stronger. Flat is the cheapest and is commonly used by poor people.

22. I cannot obtain any information about charas, which seems quite a rare article. I hear

* This paper was submitted to the Commission by Dr. Bovill, and a few explanations elicited from him in oral examination are incorporated in it.

that it is usually imported from Mirzapur; but a better variety comes from Herat.

23. Is not sold for smoking here.

24. The same people who smoke ganja drink bhang; but, being cheaper, bhang is more used by the poor. The quantity of bhang consumed is said to increase in the hot weather, and that of ganja to diminish. This is on account of the cooling properties of bhang as a drink.

(a) I cannot ascertain that bhang is eaten habitually here.

(b) A large proportion of the lower classes drink it. I hear that all worshippers of Siva take bhang and ganja.

25. There appears to be no appreciable difference. This is stated by ganja sellers.

	Ganja.		Bhang.
26. (a)	45 per cent. ...		70 per cent.
(b)	25 per cent. ...		15 per cent.
(c)	12½ per cent. ...		10 per cent.
(d)	12½ per cent. ...		5 per cent.

I cannot vouch for these figures. They are gathered from persons who take the drugs, and others, and can only be approximate.

27. An infusion of bhang is hardly looked on as an intoxicant, and is often taken, especially in the hot weather, by religious mendicants and their pupils, by sepoy, constables, jail warders, etc., and also by the general public. The use of these drugs by persons who are not devotees is probably more common among those exposed to the vicissitudes of the weather or who have to keep guard at night.

28.	Ganja.		Bhang.		Charas.
(a)	2 pice. ...		1 to 2 pice worth.	} Not known.	
(b)	Up to 4 annas, ... or in some cases a rupee's worth.		2 annas worth.		
	2 pice worth is...		1 pice worth		
	about 20 grains;		4 grains;		
	4 annas worth		2 annas worth		
	would be 160 grains.		is about 720 grains.		

As regards the quantity consumed, I find by experiment that when ganja is mixed with a small quantity of Turkish tobacco and rolled into a cigarette, the smoke being inhaled into the lungs of a person who has never taken it before, it requires three grains to produce any recognisable effect, and five or six grains to produce a decided effect; ten grains produce intoxication. I think, therefore, that the quantities mentioned above are probably correct.

29. Ordinary ganja-smoking—three parts of ganja, one part of khaini (leaf tobacco); exceptionally, essential oil of flowers, as rose, jasmine, etc.

Bhang massala is not sold; people make it themselves. Bhang 1 pice, aniseed ½ pice, black pepper ½ pice; exceptionally, bhang, sugar, ilachi (cardamoms), badam (almonds), golmirch, sonf (aniseed), kashun (suecory), cucumber seeds, and milk. Sometimes dhatura seeds are added by confirmed smokers to increase the intoxicating effects.

Two kinds of majum are sold in the bazar—(1) majum, (2) barji.

A kind of cake is made at home called katchori, containing powered bhang, dall and flour fried in ghi.

30. As a rule, bhang and ganja are taken in company; but persons of respectability conceal the fact of taking ganja. A son will not take ganja before his father, or an inferior before a superior. The use appears to be principally confined to the male sex, except in the cases of female devotees and prostitutes.

Children seldom take these drugs. A little bhang may sometimes be given them to drink.

31. The habit is easily, but not rapidly, formed. In slight cases there is no difficulty in breaking it off, but among large consumers there is a difficulty.

There is no general tendency for the moderate habit to become excessive; but in some cases it does, as with other intoxicants.

32. As far as I can learn, it does not form a part of any social or religious custom in Behar; but in Western Bengal bhang is always taken on the last day of the Durga Puja (Bijaya Dashami). Some Bengalis state that it is, others that it is not, a religious rite. In such cases the consumption is small and not likely to lead to the formation of the habit, and it is not injurious.

"Ojhas," people who foretell events, remove evil spirits, etc., take it, as they say, to offer to god (Siva).

33. The use of ganja is generally regarded as degrading, and the better classes and all respectable people look on it as such. A confirmed ganja smoker is generally distrusted. Those who smoke ganja generally conceal the fact, partly on account of its being used as an aphrodisiac and by those who consort with prostitutes.

I have not heard of any custom of worshipping the hemp plant. The use of a moderate quantity of bhang in infusion does not seem to be regarded with disfavour.

34. Not to moderate consumers, but probably so to those who exceed. As a reason I state that prisoners in jail, many of whom have taken hemp drugs in various forms, never beg for them, while opium eaters habitually do.

35. The prohibition of ganja would certainly lead to its illicit consumption among habitual consumers, but bhang is not so much craved for and might be forbidden; but the prohibition would lead to increased consumption of alcohol, and might lead, among habitual consumers, to the consumption of other drugs.

36. Not known.

37. Charas is very rare here. After enquiring at several shops I cannot find one that keeps it for sale. It is stated that charas intoxication is less marked, but more prolonged.

38. A ganja seller states that flat is the strongest, the round less, and chur the least intoxicating.

39. I cannot form an opinion, as ganja is almost always smoked and bhang drunk. The drinking of bhang is looked on as much less intoxicating than any other way of taking the drug.

40. I hear that bhang is given in some cases of intermittent fever by vaidas.

Bhang is very commonly given to cattle when they are tired or overworked. Some people give it at regular intervals, once or twice a week. It is supposed to keep oxen in good condition.

41. (a) Bhang increases the appetite.
 (b) Bhang and ganja are both taken for this purpose.
 (c) As above. Bhang is sometimes given in malarious fever.

Soldiers, constables, kahars, field labourers, boatmen and others who work hard whilst exposed to vicissitudes of weather take bhang, or if ganja smokers, ganja. This refers both to moderate occasional smokers and habitual users of the drug. Bhang is the recognised native remedy for fatigue in men and animals.

42. Bhang taken habitually in moderation is harmless; but it is said that ganja taken habitually, even in small quantities, is apt to cause dyspepsia and weakness. Habitual smokers become emaciated and bad tempered. I can give no reasons.

43. Yes.

44. The immediate effect is stated to be refreshing, exhilarating, and to increase the appetite. The effects last from two to four hours.

There appear to be but slight after-effects, and, unless among habitual consumers, no longing is produced. It is stated that the effects of bhang are more lasting than those of ganja.

I experimented on myself and found that, in the case of a person not used to ganja, the smoking in cigarettes of 3 grains, the smoke being inhaled into the lungs, produced slight singing in the ears. The smoke of 5 and 6 grains inhaled into the lungs caused singing in the ears, feeling of heat and oppression in cardiac region, rapid pulse, and at intervals a feeling of apprehension of disaster. Visions of all kinds float before the eyes, changing rapidly, of bright or sparkling appearance. The hand was steady, and by an effort the visions, etc., could be dismissed from the mind. The inhalation of the smoke of 10 grains produced the same symptoms in more marked form, with decided hallucinations of hearing voices, bells, railway whistles, etc., some unsteadiness of hand and gait, forcible vomiting without any feeling of nausea; but even here the visions and sounds were under mental control, and could by an effort be dismissed. There was great palpitation of heart.

There were no after-effects.

The intoxication is more curious than pleasant, and the dreams seem to lead up to a feeling of impending death or disaster, which is caused by the oppression in the cardiac region and the palpitations. This passed off and the visions commenced again, leading up to another attack of palpitation and apprehension. This sensation is decidedly very disagreeable, not such as to encourage a repetition of the experiment.

45. This answer only refers to bhang and ganja. The habitual moderate use of bhang appears to produce no ill effects, and in many cases that of ganja is equally harmless; but ganja-smoking, even when moderate, sometimes affects digestion and causes emaciation and bad temper. It causes a craving for food at first; but this effect is lost afterwards. I know of no case where it has caused dysentery, bronchitis, or asthma; but I have noticed hoarseness of the voice, probably due to some laryngeal irritation, among ganja smokers.

I do not know of any case in which a previously energetic and moral person has become lazy and immoral through the use of hemp drugs. For insanity see further on.

46. The indulgence in hemp drugs does not seem to do much harm as long as the consumer is well fed, even when large quantities are taken.

The question of the connection of hemp drugs and insanity is a very wide one, and in the absence of any one case in my own practice in which I can say that a sane person consuming these drugs, and with no hereditary taint of insanity has become insane after excessive indulgence, and from no other cause, I can only state my opinions with diffidence.

It appears certain that alcohol, opium, chloral, and perhaps some other stimulants and narcotics cause insanity, and there is no reason why Indian hemp should not do so too. At the same time it must be admitted that in some cases the three former may be taken in excessive quantities for prolonged periods without ever causing insanity, unless the craving for and indulgence in these substances is itself looked on as insanity, and I believe that this is true of hemp drugs also.

We know that by administering certain quantities of alcohol, etc., certain effects may be surely produced, even among those addicted to their use; but it is not known that insanity is one of them. It only occurs in a certain proportion of cases, which are probably those in which predisposition exists, which might have developed insanity from other causes, and this is probably the case with hemp drugs. The fact that although hemp drugs are commonly consumed in India and are almost unknown in England, that the proportion of cases of insanity in India which it is necessary to place under restraint in the Government native lunatic asylums, which are the only asylums, as far as I know, in India, is infinitesimal as compared with the number of lunatics in public asylums in England and Ireland. In the whole of the Bengal Presidency, with a population of about seventy-one millions, there were only 951 native lunatics of all kinds so confined at the end of 1892.

It is true that many lunatics are at large in India who would be placed in asylums in England, but the last census shows that the proportion of lunatics in Bengal is very much less than what it is at home; and of the 1,149 cases treated in asylums during 1892, only 227 cases are said to be caused by hemp drugs. This gives less than four cases per million of the population even if all the cases are admitted to be due to the assigned cause. In the Patna Asylum there were said to be 51 cases due to ganja and bhang out of a total of 289 insanes treated during the year. The proportion is large, but the actual number of cases small.

The investigations of the Commission were limited to those cases of insanity said to be caused by hemp drugs and admitted during the year 1892. Of these, there were 8 cases out of a total of 38 cases admitted from all causes.

It is perhaps unfortunate that this was the case, as I took over charge of the asylum in February 1893, and four of the cases had either died or been discharged before that time; a fifth was only twelve days in the asylum after I took charge; while a sixth case, which had recovered and been sent up for trial, had never been insane during my tenure of office. In these cases my opinion is based on the Superintendent's notes, the descriptive rolls and medical certificates, and not on personal observation.

The other cases were seen by me.

As regards the question, "Does it produce insanity (Nos. 45 and 46)?" I should say "yes

in some cases"; but the further enquiry that was made in the districts from which the insanies were sent throws doubt on the history sent up with the lunatics, and on the diagnosis in some cases.

Taking the cases in the same order as the Commission :

(1) *Salik Patick.*

I stated, this is a doubtful case, as there is insanity in the family. Hemp drugs may have been the exciting cause. The report of a full enquiry conducted by Babu Bhawani Prasad Neogi and the Civil Surgeon of Saran, states "that the witnesses who were examined, including the mother, uncle and the next-door neighbours of the lunatic, agree in saying that Salik Patick never consumed ganja, bhang, alcohol, opium, dhatura, or any intoxicating drug whatever. They all attribute the lunacy to fright in a dream."

The Deputy Magistrate supposes, that Lakhu Dosadh, the chauridar who brought the lunatic to the authorities, is responsible for the statement that the lunacy was due to bhang. He has been unable to find Lakhu Dosadh and to take his statement. This is, therefore, a very doubtful case and depends on the descriptive roll, which gives bhang as the cause, and the statement of the lunatic, which gives ganja as the drug he used. The first entry in the case book is as follows :— "February 18th. On admission incoherent, restless, sleepless; wanders aimlessly (says he used to smoke ganja)." The descriptive roll states: "He was addicted to bhang, which is said to be the cause of his being insane."

(2) *Kali Singh.*

I stated this was probably a case of insanity due to hemp drugs, at least as the exciting cause, if not more. A full enquiry on the spot held by H. Wheeler, Esq., Sub-divisional Officer of Begusarai, states that "Kali Singh himself, his relations, and a crowd of villagers testified that he commenced ganja smoking fifteen or sixteen years ago. He learned it on a pilgrimage from the sadhus."

For some time he only took two chillums a day. About three or four years ago he increased the number to four, and three or four months before his detention he raised the quantity suddenly to six, seven, and eight chillums. His son says: "There was no *thikana* about it; he smoked as much as he could lay his hands on." For two or three months before his confinement he was in the village more or less a lunatic, continuing the excessive smoking. No other cause of insanity could be discovered. This seems a good case. He admitted the use of ganja.

(3) *Gajadhar Akir.*

I stated: "This seems in all probability to have been a toxic case, and the evidence points specially to ganja as the cause, though the man indulged in liquor also." Maulvi Syed Nasiruddin, Deputy Magistrate, investigated the case in consultation with the Civil Surgeon of Arrah. The report states that "He was of temperate habits and almost a sadhu when he became insane all of a sudden about six or seven years ago (first attack of insanity). He had no cause for grief, jealousy, or misfortune. He had no illness or injury before the insanity began. He fell in company of a sadhu fakir and took to smoking ganja. He smoked for ten or twelve days only (smoking four or five chillums daily), when all at once he took into his head to renounce all worldly affairs and turn a fakir himself. (Note.—He was then mad and was

sent to the asylum. He remained insane for about five months, and was discharged cured in eight months.) He took care not to smoke ganja again, and thus abstained for five years, after the lapse of which period he could not resist the temptation, and thought he was out of danger of a relapse. He again took to smoking ganja. He had smoked for four or five days only very moderately, when the relapse came on."

He was admitted to the asylum, and recovered after seven months. The asylum history does not agree with this report. The man, no doubt, took ganja. On his first admission it is stated that he had taken it for eleven or twelve years, that is, from boyhood, he being then about 26. The report says he only smoked it for 10 or 12 days. The report says he remained sane for 5 years after he was discharged. He was back in the asylum within three years and five months of his discharge. I consider this a real case of insanity produced by ganja.

(4) *Siba Thakur.*

I thought that this was a case of insanity in which hemp drugs formed merely the exciting cause.

The report submitted by the Joint Magistrate of Darbhanga and the Civil Surgeon stated that "He took to thieving at the early age of twelve; was convicted when about 18 years old. He used to smoke ganja in small quantities; but he was particularly addicted to women. He never showed signs of madness before he went to jail the last time; on the contrary he was a very cunning thief. He must have become mad in jail."

This man appears to have always been of a wandering, dishonest, and lazy habit and to have lost control of his temper. He was often under restraint in Bhagalpur and Darbhanga Jail, and assaulted a warder in the Darbhanga Jail in November 1891 before his last conviction.

The descriptive roll states that probably he was insane when formerly in jail.

He is still dangerous, violent, destructive and filthy after 18 months' treatment. I still doubt that this case was entirely caused by hemp. From an early age he seems to have been vicious and uncontrollable.

(5) *Maghan Gir.*

I stated that the history of this case points to temporary insanity from ganja.

The further report on the case by the Magistrate of Muzaffarpur, which was received on 11th January 1894, quite bears out this opinion. There is no hereditary and no other known cause of insanity. Maghan Gir is a fakir, but has abstained from sexual intercourse all his life. He began to smoke ganja about a month before he became insane. He tried to commit suicide by lying down in front of a train, and 7 or 8 days later entered a railway carriage and broke a pane of glass. For this he was arrested and, being insane, was sent to the asylum. Report states: "He consumed about the same quantity of ganja, i.e., two or three chillums daily, for about a month. He took bhang regularly." Maghan Gir himself says he used to smoke ganja regularly for ten years, sometimes 10 chillums a day, and that he also took bhang. The only witness examined is the lunatic's brother, he, Maghan Gir, being absent on a pilgrimage.

This appears a case of insanity due to ganja.

(6) *Behari Runiar.*

I stated that there was no proof that this case was caused by hemp drugs. The report conducted by the Joint Magistrate and Civil Surgeon of Darbhanga states that "He was addicted to ganja and to drink, but not in excessive quantities. He went to the Sonepur Fair in the best of health. He returned after a stay of seven to ten days completely mad, and after staying a few days at home he disappeared. He was a wrestler." This is most likely a case of insanity caused by ganja. He, being already a ganja smoker, probably indulged in the vice to excess while at the fair. I hear that wrestlers often take ganja and bhang.

(7) *Ram Sarup Das alias Ramcharitar Thakur.*

An enquiry was held by Deputy Magistrate Maulvi Syed Karim, in consultation with the Civil Surgeon of Champaran.

I thought that the insanity was due to ganja, because it is said that the man took ganja and because the symptoms disappeared rapidly. I had no evidence that the man took ganja except the descriptive roll. The report states that there is no family history of insanity, and that "he was not addicted to ganja smoking before or during the time that he was insane, or to any other intoxicants, such as alcohol, opium, etc. Owing to certain reverses of fortune, he fell into great pecuniary difficulties and was obliged to sell his trees and mortgage his lands. These difficulties exercised a very injurious influence on his mind, and he became seriously ill with fever a year before he turned insane. It is difficult to say why the insanity in the above case was ascribed to ganja smoking, the result of the enquiries conclusively proving that it had no connection whatever with the use of that drug."

This case appears to have been due to misfortune.

(8) *Adit Missar.*

I stated that insanity may have been caused by ganja smoking, but there is no proof whatever that this is the case. He was recorded to have admitted ganja smoking, and he was a religious beggar. The report made by the same officers as in the last case (No. 6) states that "None of the relatives of Adit Missar could be traced, and consequently no further enquiries could be made in the case."

The result of the more careful enquiry, therefore, is that the cases of Salik Patick and Siba Thakur are very doubtful; that of Ram Sarup Das is altogether contradicted. The cases of Kali Singh, Gajadhar Ahir, Behari Runiar, and Maghan Gir appear to be really due to hemp drugs; and that of Adit Missar has no further light thrown on it by the enquiry, and stands on his own admission, and the fact of his being a religious beggar or devotee. In a typical case I consider hemp drugs to be the sole cause, both exciting and predisposing; but where other predisposing cause exists, such as heredity, I think it only the exciting cause.

The type of insanity is, in my opinion, most usually an active form of mania, with sleeplessness, restlessness, incoherence, chattering, destructiveness, and sometimes violence. There may be delusions and hallucinations. There may, I think, be other forms besides mania. In cases of predisposition to insanity, where ganja is the exciting cause, it might cause the kind of insanity to which the patient is predisposed. The tendency in a typical case is to recovery sometimes progressively, at others through a period of depression.

The recovery takes place usually within six months, perhaps in two months. The typical mania is temporary. It may, however, last longer, and there may be relapses.

Kali Singh's mental condition was much improved in a month when he was discharged.

Gajadhar Ahir was much improved in 6 months, and he was cured in 7 months.

Sobran Napit, admitted on the 15th April 1891 for toxic insanity, cause ganja: on admission, hallucinations, sees and converses with ghosts and imaginary persons at night. Incoherent, talkative, violent, assaults, dirty, destructive. Became much better in 6 months, but had a relapse after one year and did not recover till he had been 18 months in the asylum.

The symptoms may be re-induced by use of the drug after liberation from restraint. Gajadhar Ahir's is a case in point. He was admitted on 7th February 1888 as a case of toxic insanity, cause ganja; cured and discharged in eight months; was at home sane for about three years and five months; again took to ganja and was admitted on 13th March 1892 for the same form of insanity, and discharged cured after 7 months.

Typical Symptoms.—There are no symptoms so typical that I would diagnose a case from the symptoms alone as being due to hemp drugs. I think that any intoxicant might produce a similar or very similar form of insanity.

Insanes who have no recorded ganja history do sometimes ask for it and confess to its use. I think it in the highest degree probable that persons whose minds are becoming diseased should seek for sleep, relief from pain or excitement, or for alleviation from trouble in the use of hemp drugs, as they do in other countries in the use of alcohol; and I doubt whether this aspect of the question has been duly considered. So little is really known of the cases in the asylums that I cannot quote any to support this opinion.

In the same way I cannot produce any evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs; but I suspect that it does.

My view of this phase of the question is that a very large number of persons consume hemp drugs moderately or immoderately; probably millions do.

The number of persons so insane from this cause as to require restraint in Bengalis 227. In some of these cases the cause may not be correctly stated. In my analysis of the cases for 1892 I show that only fifty per cent. can be accepted as ganja cases. I see no reason to think that this may not be a proper average for the returns generally. The cases are generally classed, as these were, on the descriptive roll. If hemp drugs were a common cause of insanity, it is reasonable to suppose that many more ganja cases would be placed under restraint.

On the other hand, there would be nothing irrational in supposing that a certain number of cases do take hemp drugs in the incipient stages of insanity. If all the 277 had done so, there would be nothing remarkable in it; and I think it probable that many of them did so.

The statements in the descriptive rolls regarding cause are, as a rule, not very reliable. I cannot say what grade of police records them. But I think the information is often in small villages brought by chaukidars.

I often ask questions of insane people as to the ganja habit. When a man admits it, it is generally true. I have, however, met with lunatics who accumulate all intoxicants and say they smoke them all. I have also met with lunatics who exaggerate the amount they take. I think the admission of the use may be accepted as true in respect to the mere fact of the habit, but not always as to the extent of the habit. As to a statement made by a lunatic in a lucid interval that he had gone mad from ganja, it might so far be accepted, that is, it might be accepted as to the effect of the drug on himself, putting out of account anything he would not know about predisposition. If the man were mad when he made the statement it would be of no value.

If a lunatic said he took the drug in great quantities it might be accepted. I have not made a habit of going on to enquire the extent of use. Of course questions are asked, but satisfactory statements are not easily got.

A Civil Surgeon or Superintendent of an Asylum has, as far as my experience goes, very little opportunity of seeing friends. In the majority of cases friends never come owing to distance. If people of the town are brought in, their friends come to see them sometimes. But I rarely see them. I am not present when they come. I have asked friends whom I saw about the habits of the lunatics, and they give good information. But as a rule they speak to the overseer, and he tells me what they have said. Friends' statements as to the cause of insanity are quite unreliable. Often they are influenced by superstition. They assign witchcraft. They are ignorant and have no idea of any cause that they do not see, except witchcraft. They give heat as a cause sometimes. I remember a case where I suspected ganja. The man was a Government servant. He and his friends denied ganja, and said that he had become mad after a feast, but that there was no intoxicant. They said they did not know the cause. I suspected some intoxicant, probably ganja, because, among other reasons, of the speediness of the recovery. The same symptoms might have been due to alcohol or opium, as well as ganja. Ganja is the most usual intoxicant; that is why I suspected it specially. I do not think I can differentiate between insanity caused by alcohol, ganja, or opium. Any intoxicant would

produce, I think, the kind of insanity to which a man is predisposed.

Besides police reports and the statements of lunatics and their friends, there are no further means of information as to cause open to us. It is impossible for us to go and make enquiries. I have only once done it in a Patna case.

As a rule the returns as to the causes of insanity are based on the descriptive rolls, without any further enquiry on my part. The annual returns as to cause are extracted from the case book, which, as a rule, contains entries as to cause, simply, copied from the descriptive rolls. I do not think that these returns give a satisfactory basis for a scientific theory of the relation between hemp drugs and insanity. As I have said, I think they give an exaggerated view of that connection. I cannot say how great the exaggeration is, how high a percentage should be taken off the figures. It would be mere speculation to try to fix a figure.

47. It is not hereditary, but the habit may be acquired by imitation. Children do not appear to be affected.

48. As above.

49. Ganja is used as an aphrodisiac, and I hear that prostitutes use it in this way. I cannot say that its use for this purpose is more injurious than when used as an ordinary narcotic.

I am not aware that it produces impotence, though the habitual excessive use may produce this effect as a part of general weakness.

53. In some cases it appears to do so. The following are found in the asylum books:—

On the 27th of May 1873 Ramdin Gwalla was admitted for acute mania caused by bhang. On the 27th of March 1873 he suddenly became insane and murdered one of his neighbours and wounded three other persons with a sword.

On 17th September 1893, Paturat Malar was admitted for toxic insanity caused by ganja. He suddenly became insane and murdered a child. On a previous occasion he had attacked a woman with an axe. Admits smoking ganja.

It must, however, be stated that sudden attacks of homicidal mania occur without the use of ganja.

110. Evidence of SURGEON-MAJOR R. COBB, Civil Surgeon and Superintendent, Lunatic Asylum, Dacca.

1. I have visited several shops where ganja, etc., are sold in Dacca and other places in Bengal. I have treated professionally both in Government institutions and in private practice, a large number of persons who have been in the habit of taking hemp drugs, and I have also met with many such persons during a service of some 18 years in Lower Bengal, and conversed with them on the subject of their habit.

2. These definitions may be accepted for this province. Ganja is known as ganja. Siddhi and bhang are the names locally used. Charas is called charas.

3. I have no personal knowledge of the cultivation or growth of hemp.

14. I have very little knowledge of the preparation or manufacture of the hemp drug.

18. I have been informed by shop-keepers that ganja will deteriorate very quickly if neglected. It is necessary to keep it dry. In Dacca ganja is usually wrapped in straw and kept in bags.

19. Ganja and charas are only used for smoking in Dacca. I am not aware that they are put to any other uses.

20. The lower classes usually smoke ganja. The Dacca shop-keepers inform me that about 60 per cent. of their customers are low class Muhammadans, and 40 per cent. Chamaras and other low caste Hindus.

21. Flat ganja is preferred for smoking.

22. I do not know.

23. No.

24. I do not know.

25. I am informed by the shop-keepers that the use of ganja and charas has decreased somewhat of late. They attribute this to the increasing dearness of food.

26. (a) 85.0 per cent.

(b) 2.0 ditto.

(c) 12.5 ditto.

(d) 0.5 ditto.

100.0

27. Muhammadans of the lower classes, Chamars and other low caste Hindus.

28. (a) $7\frac{1}{2}$ to 15 grains per diem, cost 1 to 2 pice.

(b) 60 grains per diem, cost 2 annas.

29. As far as I could discover, nothing (except in the case of bhang massala) is ordinarily or exceptionally mixed with these drugs in Dacca. Dhatura is not so used here.

Bhang massala is used for the purpose of mixing with.

It is composed of—

Dried rose leaves, lettuce seeds, aniseed, poppy seeds, black pepper, cucumber seeds, mowri, kakoor seeds, kashni seeds, gokhura thorn.

30. The consumption of these drugs is usually practised in company and mainly confined to the male sex, except in the case of prostitutes.

They are generally used in middle and advanced life. About 70 per cent. of persons addicted to these drugs are middle-aged or old. It is not usual for children to consume them; but from enquiry among the shop-keepers here I find about 8 per cent. of these customers are young people from 12 to 16 years old.

31. The habit is easily acquired, and, like the habits of smoking and moderate drinking, is not easy to break off; but this difficulty increases with the amounts consumed. Seeing the small proportion of the excessive to the moderate users of the drugs, I do not think in the vast majority of cases there is a tendency for the moderate habit to develop into the excessive.

32. Ganja smokers are in the habit of meeting together in parties for the purpose of indulging in the consumption of the drug. Its practice appears to be mainly used among the lower classes of people as an accessory to social intercourse, and is then temporarily used and not likely to lead to the formation of habit, nor is it otherwise injurious. Excessive consumers usually practise the vice in solitude, and it is then injurious.

33. Bhang is considered less hurtful when taken in excess than charas, and lastly, ganja is thought to be most deleterious in excess.

I am not aware of any public opinion in regard to the practice.

I do not know of any custom of worshipping the plant.

34. It would be a serious privation to all classes of habitual consumers to forego the consumption of the drug they use. My reasons for this opinion are as follows: The cases may be compared with the cases of persons who are in the habit of using alcohol. In the case of the moderate user a want

is felt if the stimulant is withheld; if taken in larger quantity appetite and digestion may suffer, and lassitude and a general feeling of uneasiness may result. In the case of the excessive consumers this want and *malaise* becomes an imperious craving, which must be satisfied at all costs.

35. I do not think it would be feasible to prohibit the use of these drugs. I believe they would be consumed illicitly. The prohibition would occasion serious discontent among the customers. I cannot give any opinion as to the probability of such discontent amounting to a political danger, or as to the effect of the prohibition to the consumption of other stimulants.

36. I have no reason for thinking that alcohol is being substituted for these drugs.

37. The effects of these are much the same, but charas is weaker.

38. They appear to have much the same effect.

39. I do not know. Ganja and charas is only used for smoking here, and bhang is usually drunk. I have not seen cases of ganja and charas eating, so cannot compare the results of smoking and eating and drinking.

40. Kabirajes use bhang in bowel complaints especially. The preparations of *Cannabis indica* are largely used by native doctors, generally in the treatment of dysentery, chronic diarrhoea, etc.

Bhang is used in the treatment of cattle disease and in the form of condition powders.

41. (a) Yes.

(b) Yes.

(c) I have no experience of their use as a preventive of malaria.

(d) I have found the moderate use of *Cannabis indica* very useful in the prevention and treatment of attacks of chronic dysentery. I refer to the moderate use.

42. I consider the moderate use of these drugs to be harmless, and in many cases beneficial, for the reasons I have given in paragraphs 41, 44, and 57a.

43. Yes.

44. The moderate use of these drugs produces a sense of exhilaration and refreshment, but not intoxication. It allays hunger and creates appetite. As ordinarily used the effect of bhang lasts three or four hours, ganja fifteen or twenty minutes, charas fifteen or twenty minutes.

45. (a), (b), (c), (d), (e), (f) No. See below, Nos. 46 and 57a.

46. The habitual excessive use of ganja produces intoxication and sometimes sleep, which usually last two or three hours, the constitution is gradually impaired, the digestion is injured, asthma and bronchitis may supervene, and disinclination and incapacity for work results, and the moral sense becomes blunted. (See Medical Report 57a.)

47. No.

48. No, I cannot find any evidence which would lead to the conclusion that either the moderate or excessive use is a hereditary habit. Cases occurring in the same family probably result from the effects of example.

49. I have been informed by certain shop-keepers that ganja is sometimes used in moderate doses as an aphrodisiac. Prostitutes use it sometimes, but not as an aphrodisiac.

50. I have seen cases in which impotence has been supposed to have resulted from the excessive use of ganja.

51. No; the great majority are respectable poor persons. None.

52. I am not aware that there is any connection of the excessive use of these drugs with crime, except in the case referred to in paragraph 53.

54. I do not know.

55. I do not know. I should think if a large enough dose were given complete stupefaction might be induced by this drug without admixture.

56. Bhang massala disguises the smell and taste of the bhang, and is supposed by the natives of this country to increase its cooling effect.

57. I have no experience of these uses of ganja and charas.

57a. To sum up, I am of opinion that the moderate use of ganja is harmless, and in some cases beneficial, and that the use of this drug in small quantities has much the same effect on the mind and body as the moderate use of alcohol, that is to say, it is a stimulant, digestive, and mild sedative to the nervous system.

In the vast majority of cases the drug is taken in small quantities, usually at social meetings, and is as harmless as a cheroot or a glass of sherry.

It is difficult to state with any exactness the number of persons who are in the habit of using the drug in this manner; but I have endeavoured to estimate it by multiplying the average number of customers of each shop by the number of shops in the town of Dacca, and I have come to the conclusion that about 8 or 10 per cent. of the population are ganja (or charas) smokers.

I am inclined to think that this estimate is not far from the truth, because the Manager of the largest jute business in Narainganj made a careful census for me, with the result that out of 3,000 coolies he found nearly 300 ganja smokers. If this estimate is correct, there are some 6,000 or 8,000 persons in the town of Dacca alone who are in the habit of using these drugs, and (as I have shewn in paragraph 26) only 2 per cent. of these are excessive consumers (see paragraph 26).

Now with regard to the habitual excessive use of these drugs. I have no doubt that their use is hurtful both to the body and mind. They produce a form of intoxication; gradually the constitution becomes impaired, the digestion fails, there is a disinclination for work of any kind, and a general enfeeblement of the body accompanied by bad temper and excitability of the mind. In most cases the ill-effects end here, but occasionally insanity results. This is of two kinds—

(1) Usually the insanity is of an acute and temporary nature, and sanity is restored soon after the drug is withheld, often to again return when the habit is resumed.

(2) In rare cases the insanity becomes chronic.

The following cases which I have selected from among the patients of the Dacca Lunatic Asylum

will illustrate both of these types of insanity produced by the hemp drugs:—

Example I.—Dayal Dass Bairagi, aged 45, was born in Sylhet, where his father was a shop-keeper. When he was about 16 years old his family moved to Narainganj. Dayal was then a strong and healthy lad. His father smoked ganja in moderation; he was a healthy man and quite sane, and none of Dayal's relatives were insane. When he was about 30 years old he made the acquaintance of some petty landholders who used to meet together and smoke ganja. He was induced to go to these parties, and so gradually contracted the habit.

At first he smoked only twice a day, and consumed about 7 or 8 grains of ganja in the 24 hours; but he gradually increased the quantity, until in 1890 he smoked seven or eight times a day and as much as 60 grains of the drug. He states that when he first began to smoke it made him cheerful and happy, and he felt fatigue less than before.

In September 1890 he got into some trouble about a woman and had to leave his village. He took to wandering about as a beggar and smoked more and more ganja, until he smoked more than double the quantity mentioned last. At this time he began to lose his appetite, but felt as strong as ever; but he noticed that his feet appeared to be walking in the air. He then remembers going about the country, singing and dancing. After this he remembers nothing distinctly until he came to himself one day in the Dacca Jail, where he had been taken as an under-trial prisoner, charged with theft. He was found to be incapable of making his defence and transferred to the asylum. On arrival there he was found to be quite sane, and he remained so until his discharge on the 20th September 1893.

Example II.—Rajkumar Roy, aged 29, was admitted into the Dacca Lunatic Asylum in 1878 with acute mania. He recovered in a short time and was released.

A year and a half after his release, on the 22nd October 1880, he was again admitted into the asylum furiously insane. His insanity was attributed to excessive ganja smoking and bhang drinking, and again released after a short time.

On September 23rd, 1885, he was admitted into the asylum for the third time with the same symptoms. On this occasion Dr. Crombie, who was then the Superintendent, in his evidence before the Magistrate, stated that "his symptoms were obviously due to ganja, of which he was a confirmed smoker." He also certified that he was suffering from the chronic use of ganja. Immediately after his admission he was again quite sane, and discharged cured on 30th January 1886.

He was admitted into the asylum for the fourth time on the 28th May 1887 with exactly the same symptoms of mania. He again quieted down soon after admission, and as he remained quite sane, he was discharged cured on the 16th August 1887. Since his discharge he has been seen several times by the Civil Hospital Assistant of the Asylum. On the last occasion on which they met, three months ago, the recovered lunatic informed the doctor that he had quite given up ganja since his release from the asylum in 1887, and had in consequence been quite well ever since.

These two cases are samples of several that have passed through the Dacca Asylum.

The second case is instructive as showing that *Cannabis indica* may be the sole cause of mania for—

- (1) The patient was an excessive ganja smoker.
- (2) He had at least four separate attacks of mania in eight years.
- (3) On each occasion he became quite sane soon after he was placed out of the reach of hemp, and remained so until he was released.
- (4) As soon as he gave up the use of ganja he became sane and has remained so for six years.

The following is an example of chronic mania induced by the use of hemp:—

Example III.—Harkumar Adhikari, 27 years of age, was admitted into the Dacca Asylum on the 27th June 1886, suffering from chronic mania. His insanity was attributed to the excessive smoking of ganja. In his descriptive roll it is stated that he smoked ganja to great excess and then became insane. On admission he suffered from delusions, he talked incoherently, and was very quarrelsome and violent. After admission he remained very much in the same state for some time; then he gradually became less violent, and his excitement changed to a depressed state of mind, and he became dull and melancholy. He is still in this state, but occasionally has fits of violence. There is no family history of insanity, and the patient admits that he was a great ganja smoker.

In the Dacca Asylum there are at present 53 out of 240 lunatics, whose insanity has been attributed to ganja. In many of these cases the fact of their being ganja smokers is doubtful. In others there is a history of spirit drinking as well as ganja smoking. In a third class of cases, in addition to ganja smoking, there is a strong family history of insanity. On the other hand, some insanes who have no recorded ganja history, confess to the use of the drug. When all these cases are taken into consideration, there remains a residuum in which ganja appears to be the only cause to which the insanity can be referred. However, this residuum is extremely small when compared with the enormous number of persons who are in the habit of using these drugs. I have calculated that there are some 6,000 or 8,000 ganja or charas smokers in Dacca town now. The insanes in the Dacca Asylum come from the whole of Eastern Bengal, from Sylhet, Cachar, and Cooch Behar. It is obvious, therefore, that the proportion of insanes whose insanity can be attributed to hemp to the large number of users of the drug is almost infinitesimally small.

Oral evidence.

Question 1.—I entered the service in March 1876. I have served in most stations in Lower Bengal. I have had additional charge of troops occasionally, but have been in continuous civil employ. For the last two years I have been in charge of the Dacca Asylum, but had no asylum experience before that. I have for ten years made a special study of nervous diseases in general, not particularly of insanity. I have attended special hospitals for nervous diseases in England during furlough.

Question 34.—Ganja smokers have told me of their craving for the drug. I have held charge of jails for the greater part of my service. I have never been asked for ganja by any prisoner, nor have I had to allow it medicinally as I have had to allow opium. The statement regarding the "craving" is not based on any physiological facts which I have observed.

Question 41.—Under my answer (d), I refer to the medicinal use. I have allowed patients to take the drug when they have been suffering from dysentery. Medicinally I use the "extract" of the pharmacopœia, and sometimes prescribe it as a preventive to patients liable to dysentery, though they may not have the disease upon them. I should think the smoking of ganja might have a somewhat similar action on the nervous system. The drug acts, I believe, through the nervous system, producing a sedative effect.

Question 44.—I have experimented with the drug on myself, and found that it produces the effect described. In heavier doses it produces incoordination, and I have felt that symptom in the mildest form from a dose of the extract corresponding to about 25 grains of ganja.

Question 46.—I have had no experience that excessive use of the drug produces dysentery and bowel complaints.

Question 57 (a).—The percentage of ganja consumers ascertained among the coolies at Narain-ganj is approximately true for the whole population of Dacca, for there are women and children among the coolies where the calculation was made. No doubt, the habit is more prevalent among the coolies than among the general population; but I do not think the estimate of 6,000 is excessive for Dacca.

The information given in my written answer regarding the case of Dayal Dass Bairagi is derived from sources apart from the asylum papers. It was derived from the man himself by my personal examination before his release. I am confident about this case.

In the case of Rajkumar Roy, I think the lunacy is properly attributed to ganja, in spite of the references contained in the asylum records to dhatura, opium, and spirits, because of the history and Dr. Crombie's opinion. In respect of the history, the statement made by the Civil Hospital Assistant regarding the abandonment of the habit of taking hemp I look upon as especially important.

In the case of Harkumar Adikari the references to the lunatic's relations contained in the Bengali descriptive roll do not appear in any other place in the asylum record. Dr. Crombie has also made an entry about the shape of the man's head. These facts admit the possibility of there being another cause for insanity but ganja.

The three cases described, whether truly attributable to ganja or not, are typical of what I should consider ganja cases as likely to be.

The diagnosis of hemp drug cases may be based upon previous history, the character of the insanity, the history of the case while in the asylum including information given by the patient himself when he recovers or has lucid intervals, or by friends, or otherwise ascertained. There is nothing very typical in the symptoms; but still ganja insanity has points of distinction from other kinds of insanity. It is very temporary.

Confinement of the patient with removal of the exciting cause generally brings about rapid cure. Delirium is a prominent feature. There are other general features which it is difficult to put into words, and which experience alone can teach one, just as one recognizes a face without knowing exactly why. One recognizes ganja insanity intuitively. All the symptoms I have described may be present in other kinds of insanity, but one judges by the combination of them. If the symptoms were present without any history, I should not like to make a certain diagnosis of toxic insanity; but I might make a probable diagnosis, subject to further information, and probably should be right, on account of my experience. It is essential to have a history for a certain diagnosis. The attack of ganja insanity may last weeks or months; but it is common to find patients brought as raving lunatics recovered when they reach the asylum. If the attack lasted from 12 to 15 months, the fact would shake my diagnosis, unless there were history of previous attacks and gradual degeneration from ganja. I have examined brains in cases of hemp drug insanity, and have discovered no abnormal appearances, which could be attributed to the effect of the hemp. I cannot say that I should expect to find any such appearances in cases of temporary insanity. I do not remember to have made *post mortem* of any person permanently insane from the hemp drug. Such cases are very sure.

The statement made by Ramesh Chandra Sib on the 19th instant has been read to me, and describes accurately the procedure followed in the asylum in regard to cause. I do not approve of entering ganja as the cause of insanity merely on the ground that the insane is known to have used the drug, because it must be misleading when ganja is so commonly used. But this is an accurate statement of the procedure. Therefore the entry of cause in Statement VII of the annual report is based exclusively on the descriptive rolls. I do not consider that the descriptive rolls contain information which is reliable, but they help us in making up our minds. They do not afford a satisfactory basis for judging scientifically of the connection between hemp drugs and insanity.

I have studied the cases admitted to the asylum in 1892, and I put in a note about them—(Note attached).

As to the effects of ganja generally, I should say that until I began to study the question with a view to give evidence before the Commission, although I had a vague notion that ganja-smoking was prevalent among the lower classes in Bengal, I had no idea that the practice was as common as I have since found it to be.

Before July 1893, when I began to enquire into the matter, my experience of the effects of hemp drugs was limited to the cases of insane persons whose insanity was attributed to their use; and as in many of these cases I satisfied myself that the insanity was really so caused, I naturally acquired a prejudice against the habit. But when, on enquiry, I found that hemp drugs were so widely used, and in the majority of cases with the beneficial results I have detailed in my evidence before the Commission, my views as to their evil effects were greatly modified.

Appendix.

Note on cases of insanity attributed to the use of hemp drugs admitted into the Dacca Lunatic Asylum during 1892, put in by Dr. Cobb.

1. *Charan Dass*.—There is no reason to suppose that ganja was the cause of this man's insanity, except the entry in his descriptive roll, in which it is stated that he was "addicted to ganja," and a remark by Dr. Wise in 1872, that "he is a stupid fellow, who brightens up when ganja is mentioned."

The history of his case is not that of a ganja maniac, and the *post-mortem* appearances suggest chronic degenerative changes in the central nervous system.

2. *Dayal Dass Bairagi*.—I have no doubt that this was a case of temporary insanity induced by smoking ganja. He is example No. 1 in the evidence which I have already given.

The history of the gradual supervention of his insanity under the increasing doses of ganja and his rapid recovery when confined are instructive. The fact that his father was a ganja smoker is worthy of notice. These facts I discovered in careful personal examination of the man.

3. *Baishna C. Saha*.—There is no evidence of his being a ganja smoker beyond the entry in his descriptive roll that he was addicted to ganja and spirits.

The case was evidently one of simple mania.

4. *Uzir Ali Sha*.—The evidence of ganja-smoking in this case is very untrustworthy. It is vaguely stated in his descriptive roll that he was formerly addicted to ganja. The case was probably one of simple mania.

5. *Swarup Kaibarta*.—There is not the slightest reason for supposing ganja-smoking to have been the cause of this man's insanity other than the entry in his descriptive roll. On the contrary, the case presents all the characteristics of simple melancholia.

6. *Sekh Waris*.—This man was found to be quite sane on admission into the asylum. There is not a particle of evidence to support the view that ganja caused his insanity, if he ever was insane.

7. *Durga Charan Changa*.—This is undoubtedly a case of recurrent mania. Beyond a vague reference to ganja-smoking in his descriptive roll, there is no reason to attribute his insanity to a toxic cause.

8. *Madhab Ram Deo*.—This patient's insanity is definitely attributed to the use of ganja in his descriptive roll, but I think it is extremely doubtful if the drug had anything to do with it.

9. *Gagan Chanar Chathati*.—This is a doubtful toxic case. It is stated in the descriptive roll that he was addicted to ganja and spirits.

10. *Garua*.—There is no evidence of ganja being the cause of insanity, except the fact stated in the descriptive roll that he was "addicted to ganja."

11. *Narayan Dass*.—This man is an up-country fakir, and was known to be an excessive ganja smoker, and he does not deny the fact. The whole history of his case leads me to the conclusion that ganja was the exciting cause of his insanity.

12. *Monubar Mohanta*.—The entry in the descriptive roll and the medical certificate that the "lunatic is addicted to ganja" are the only reasons for supposing this to be a case of toxic insanity. In view of the fact as shown by the papers that this man's relatives were not known and nothing else was known of his case, the above entries are of less weight than they would otherwise have been.

13. *Narayan Nawa*.—This appears to be a case of insanity induced by the use of ganja.

I base my opinion on the opinion of the Civil Surgeon of Cachar and on my own observation of the case.

14. *Padai Ram*.—This case also appears to be one of toxic insanity. I cannot at present give reasons for this view.

111. *Evidence of SURGEON-MAJOR J. B. GIBBONS, Superintendent of the Campbell Medical School and Police Surgeon, Calcutta.*

Oral evidence.

I have been twelve years in India, all in the Bengal Presidency. I have been ten years in Calcutta attached to the Medical College. I have been acting Police Surgeon for the last eleven months. I have not had any special training or experience in insanity; but I have come across very many cases of insanity. I meet with insanes in the Campbell Hospital (where I have been Superintendent since May last). I am Superintendent of the hospital and have not to do with the treatment of cases directly as a rule. These insanes come into the hospital as brought in by the police, a man being picked up in the streets with a wound on him or sick, or a man is brought by the police who has been found wandering about the streets insane. In the hospital the man (if ill) is kept till he is cured, and I write and inform the police that he is cured and (a) that he is harmless and may be safely made over to his friends, and they so dispose of him; or (b) if he is violent, I certify this and he is removed to the asylum by the police. I fill in the Form No. 2 "certificate of medical officer in the Form A in the Schedule to Act No. XXXVI of 1858." I merely certify to the fact of insanity and to the facts (a) observed by me or (b) communicated by others, on which my opinion as to this fact of insanity is based. I do not certify to cause in that certificate nor anywhere else. With these cases the police bring a descriptive roll which they have filled in. When the man is cured I write across the corner of this descriptive roll, "Please remove A B that he may be made over to his friends" or otherwise, as the case may be (*vide supra*). We do not keep these descriptive rolls. I make no entry under any heading in the descriptive roll. I have nothing to do with it. It is a police document. This descriptive roll is precisely the same as that supplied to me in the second class of cases with which I now proceed to deal, *viz.*, the cases of criminal lunatics who are sent to me as Police Surgeon. The criminal lunatic is sent to me with a request from the Magistrate in letter form "to examine the accused A B as to the state of his mind and appear before the Magistrate" on a fixed date, to give "evidence as to the result of such examination." I am also directed in this letter to "produce his 'Medical History' Sheet," if I am of opinion that he is of unsound mind.

The man is as a rule put in the Presidency Jail and I visit him there. Rarely he is released on surety. I first go to the police and ask for the descriptive roll. They send me Form No. 4. It is of assistance, or ought to be of assistance, to me in examining the man. When I have examined the man and made up my mind about him, I fill in the "Medical History" Sheet.

I produce, as an example, the descriptive roll of a lunatic—not a selected case, but the last that I have disposed of. The important point to notice in it is the large number of entries filled in as

"unknown." I think that as a rule the police fill in too many entries. Satisfactory information must be very difficult to get.

In filling in my medical history I have of course also frequently to use this word "unknown." The only three questions that I deal with are "(4) Physical state," "(6) Type of insanity" and "(12) Is he capable of taking care of himself?" For all the rest I depend on the "descriptive roll." I make no inquiries myself. I only examine the patient as to the state of his mind. But I make no enquiries as to the entries in the descriptive roll. The only persons I could inquire from are the police, and they have entered all they can. I could not inquire from friends as a rule; for these people very rarely have friends. I have an exceptional case before me now of a man in a prominent position whose friends are affording me information. He is at large on security. But in almost every case I never see friends. I do inquire from the lunatic himself and talk to him, and things may come out. But I would not enter his statements in the history sheet if he were a lunatic; for I would not trust what he said.

In my "Medical History" I never enter cause. I have not sufficient information. I never even enter it if the police give it. I do not believe in their entries. If I came across a case where I could satisfy myself that their entry was correct, I should make the entry. But I have never come across such a case. I discredit the police entry. From the mere fact that they so frequently put down ganja as the cause, I discredit them; for I have seen a good number of cases of ganja poisoning. Ganja is the commonest cause they put down. I do not accept ganja as an ascertained cause of lunacy. I am not here speaking of a mere intoxication lasting a few days. And because I am responsible for the entries in the "Medical History," I do not make such an entry. I know of no facts that establish the view that lunacy is caused by ganja. Therefore I do not accept it. If I had particulars from the police of sudden loss of money or of friends, and that there was sudden loss of mind in consequence, I should enter that cause. I should be able to corroborate it from the form of the lunatic's delusions and otherwise. So also if I had evidence of frequent fits of epilepsy I should accept that as a cause of dementia; that is, I should accept as the cause in any case any well-ascertained cause of insanity. But I do not accept a drug as the cause because I have no knowledge of well-ascertained facts making the drug an established cause of insanity. As a fact, then, my procedure as a rule is to leave cause blank; and I do this because of my distrust of the information I receive.

I have heard the statement which Assistant Surgeon, Devendranath Ray, made before the Commission. His statement regarding procedure is correct. We do not enter cause in the cases he refers to.

I disagree altogether with him as to his attributing insanity to ganja on the mere statement that the man uses the drug. I have no satisfactory evidence of cases of true permanent insanity due to the use of ganja. And in any case to put insanity down to the drug without knowing the amount used, the time during which the habit existed, and the previous history of the man is quite wrong.

I quite agree with the Assistant Surgeon as to the great difficulty of satisfactorily ascertaining the cause of insanity in the cases we have to deal with.

I have no personal experience of the physiological action of hemp drugs on the human subject. The best account of the action of the drug I know is in H. C. Wood's "Therapeutics." It is an American work. I am not acquainted with any literature dealing with hemp drug insanity. I have had experience of hemp drug intoxication. I treated every case in the Medical College Hospital for about eight years when I was Resident Physician and Professor of Pathology. There were not very many. The symptoms I observed were analogous to alcoholic intoxication. But the excitement was more intense, the patient livelier (not so soon comatose as in alcohol) and the excitement lasted longer. Alcohol causes intoxication by poisoning the centres. They are first stimulated; and stimulation beyond a certain extent ends in exhaustion. Hence the comatose condition. Suppose the stimulation is frequently repeated by repeated doses of alcohol, you have an overgrowth of the coarser elements; and these coarser elements finally replace the highly organised elements. The physical and mental effects following this alteration would be a dementia preceded by a period of irritation. This period of irritation would have as symptoms change of disposition, grandiosity in ideas, fits of depression alternating with fits of exaltation, and the other symptoms of alcoholic insanity. Chronic alcoholism may thus produce an overthrow of mental equilibrium.

As to hemp drug intoxication, I suppose that in the early stages of hemp drug intoxication there is congestion of brain. This is my supposition. I have no pathological experience for that. I have not, personally, experience of the stimulation of the centres in alcoholism; but the condition of the brain is well known. To a certain extent the condition of the brain in the early stages of alcoholism could be ascertained by naked eye inspection without the microscope. I have examined ganja smokers' brains. I examined the other day (since I knew that I was required to give evidence here) the brain of a man said to have been a smoker for many years. He died suddenly in a factory of phthisis and was sent in. The brain and the membranes were perfectly healthy. I know nothing of the man

except that the police reported that for many years he had been a ganja smoker. I made naked eye inspection and did not use a microscope. Against this I had a case of a man "addicted to drink for some years" whom I examined a month ago *post mortem*. In his brain the membranes were opaque, thickened, and the convolutions of the brain shrunken; and there was an excessive quantity of brain fluid. It was a typical drunkard's brain. There was no insanity. He had died suddenly of some other cause and was sent in by the police, as in the other case. I knew nothing of either this man or the other except through the police report. I knew nothing of the extent of the habit in either case except what the police said.

I have no evidence of what the frequent stimulation of the brain caused by ganja would result in. I cannot argue by analogy with alcohol; for there is nothing that I know to show that ganja is an irritant of the same class as alcohol. The evidence wanting is pathological evidence founded on facts observed after the experimental exhibition of these drugs on the lower animals.

The position I assume then is this, that I admit the analogy between alcoholic and ganja intoxication as regards the general symptoms. These symptoms are due to the action of alcohol on the brain. It is possible, I admit by analogy, that the symptoms in ganja intoxication are produced by the action of the drug on the brain. In the case of alcohol it is well ascertained that the repeated exhibition of alcohol leads to grave structural changes, which sometimes give rise to certain mental and physical symptoms. In the case of hemp drugs, I will not admit that repeated or long continued stimulation of the brain will produce any structural changes in the brain, because there is no pathological evidence; and the facts are, as far as my experience goes, dead against it. I have examined the brains of many persons who were said to be addicted to ganja and have discovered no structural changes. I did not use the microscope, and can only speak to coarse structural changes. As far as I have read, too, there is nothing about these changes in books on pathology. Hemp drugs are never mentioned among the causes of structural changes in the brain.

In the case of insanity from grief or other so-called moral cause there need be no structural changes that are apparent in the brain. Such changes are found occasionally, but they are not found in many cases. But in respect to insanity following a physical cause, I should assuredly expect changes, and that they would be visible structural changes. The established physical causes are such as alcohol, syphilis, injuries. These are very few compared with the great mass of mental disease. I know nothing of dbatura as a cause of insanity.

112. Evidence of SURGEON-CAPTAIN J. H. TULL WALSH, Superintendent, Lunatic Asylums, Calcutta.

Finding it somewhat difficult to reply to the questions given in Chapter VI, with sufficient fullness in the space allotted, I take the liberty of stating my opinions on some of the points raised in that chapter in the following report:—

Commencing with question 39, I may state

that having been unable to obtain subjects for comparative experiments, I have no actual knowledge of the comparative effects produced by different preparations of the hemp drugs. The Hospital Assistant attached to the Native Lunatic Asylum informs me, however, that it is generally

thought that bhang drinking produces excitement and possibly a maniacal condition; while the action of ganja when smoked is slower, and probably takes a long time to affect the intellect, producing then a stupid or melancholic condition. This opinion, however, requires confirmation. The effect produced by bhang is, it would appear, very like that produced by alcohol when taken in large quantities; it produces an intoxication more marked, but more transient, than does ganja when smoked. It must be remembered that these remarks apply either to beginners or to habitual drinkers or smokers who have exceeded their usual allowance. Bhang when drunk is generally mixed with water and sweetened. It is possible, that dhatura is sometimes added to increase the intoxicating effect, and to render the subsequent stupidity more prolonged. With regard to ganja I am of opinion that it is most frequently smoked with an admixture of tobacco and it is then probable that the exciting effects of the drug are modified by the narcotic powers of the tobacco. It is a well known fact, and one to which I shall have to allude again, that dhatura seeds are often added to ganja to increase the stupefying effect. This addition is not frequent, however, among ordinary ganja smokers who use the drug to promote a mild and exhilarating intoxication. It is confined principally to debauched fakirs, into whose morals it is needless to enquire and to gangs of thieves who rob their victims after stupefying them with dhatura introduced into a chillum supposed to contain ganja only. Of the truth of this statement the daily papers and police records afford numerous instances. Judging from the effects of even large doses of the tincture of *Cannabis indica* used in medical practice for various complaints, it would seem that a moderate use of hemp drugs may be beneficial; at any rate such moderate use cannot be harmful. By moderate use, I mean used only occasionally—short of intoxication. Here again I must use as a comparison the action of alcohol. Delirium tremens, which may be called the acute insanity of alcohol, does not occur to the moderate user of that liquid but when the amount consumed is always sufficient to produce intoxication or a condition verging on intoxication and the act of consumption is regular and habitual, delirium tremens or chronic alcoholism may be produced; or a fit of alcoholic insanity may ensue. I do not here allude to dipsomania. In a similar manner it is, I consider, probable that excessive use or continued abuse of hemp drugs may produce violent intoxication, transient attacks of mania, melancholia, or a condition allied to dementia. Recovery in such cases is, as in alcoholism, rapid when the patient is deprived of the opportunity of obtaining hemp drugs. For the purpose of this enquiry I have carefully examined the records and annual reports of the Lunatic Asylums in Bengal from 1862 up to the present time, and I think it will not be out of place to give a few of the many extracts I have made, from the opinions held by the various medical men who have written on the connection between hemp drugs and insanity during a period of 30 years. I have occasionally added a remark in the form of a note to these extracts. I have numbered them in order the more easily to refer to them in the subsequent portions of my report. I have not thought it necessary to refer to the general opinions of medical and other writers, because the books containing them can and probably will be consulted by the members of the Hemp Drugs Com-

mission and nothing could be gained by multiplying quotations:—

1. "Of the 296 cases of insanity treated during the year, the apparent and assigned causes have been given in Statement No. 10. It is not easy to ascertain accurately the cause in many cases; the Statement must, therefore, be taken as an approximation. In many of the cases where the causes are entered as unknown, ganja or some form of intemperance may be suspected." (Dr. A. Simpson.—*Annual Report, Dacca Lunatic Asylum* for 1862.)

2. "The causes of insanity among the patients admitted to the Asylum are given in the annexed table; but on this head I regret to observe that the information furnished by Magistrates, as given in the Rolls accompanying Lunatics is of the most meagre description, "cause unknown" being stated in 69 per cent. of the admissions."

Causes of Insanity.—

Smoking ganja and the use of intoxicating drugs	12
Grief from loss of a child	1
Hereditary	3
Sequelæ of fever	1
Unknown	38
Total	55

(A. Fleming, M. D.—*Annual Report, Murshidabad Lunatic Asylum*, 1862.)

3. "Of the 416 cases in which the causes of insanity have been ascertained, the disease is attributed to indulgence in intoxicating drugs and liquor in 313 persons, or, as in 1862, to upwards of 75 per cent. The malady was hereditary in 24 instances, and was excited by moral causes—principally grief on account of loss of relatives or property—in 63." (*Annual Report on Lunatic Asylums, Bengal*, 1863. By T. McClelland, Esq., Officiating Principal Inspector-General, Medical Department.)

4. "The chief physical cause has been indulgence in ganja; 165 or 50 per cent. of the total number treated, have been distinctly traced to that cause, sixteen have been traced to hereditary tendency, eight to opium, seven to epilepsy and five to ardent spirits." (A. Simpson, M.D.—*Annual Report, Lunatic Asylum, Dacca* for 1863.)

5. "The chief physical cause has been indulgence in ganja; 173 or forty-nine per cent. of the total number treated have been distinctly traced to that cause, seventeen have been traced to hereditary tendency, five to opium, seven to epilepsy, and three to ardent spirits." (W. B. Beatson, M.D.—*Annual Report, Dacca Lunatic Asylum* for 1864.)

6 "Regarding the causes of insanity, ganja and dissipation have been by far the most fertile causes among those admitted here; no less than 40 per cent. occurring from them alone. These two causes almost invariably accompany each other." (J. M. Coates, M. D.—*Annual Report, Cuttack Lunatic Asylum* for 1864.)

7. "And so I am of opinion that real spontaneously produced mania, is rare in our Asylums, and the hereditary form still more so. Exciting causes (some not to be met with at home) are ready at hand, and to them we must attribute the vast majority of cases; and simply withholding them, works the great majority of cures. Thus, I find in my predecessor's returns that out of 172 cases under treatment in 1864, 101

were attributed to the use of ganja, bhang, opium and spirits; and that out of 48 cures, 39 belonged to the above class.

"My Returns prove the same fact; out of 190 cases treated in 1865, 99 were attributed to intoxicating drugs; and out of 75 new admissions, 44 were due to the same causes.

"In each case, the percentage is very large.

"Lastly, out of 363 new admissions in all the Asylums of Bengal, 329 were attributed to indulgence in ganja, bhang, opium, or spirit, *i.e.*, 90·6 per cent. of all the cases. If these exciting causes were checked or removed, the asylums would speedily be depopulated." (Robert F. Hutchinson, M.D.—*Annual Report, Patna Lunatic Asylum*, for 1865.)

8. "Ganja still continues to appear as the fruitful cause of insanity in nearly four-fifths of the cases where the cause is known.

"Orders have recently been issued, which, it is hoped, will tend to procure a better history of the antecedents of lunatics." (*Government Resolution*, 1866 (signed) A. Eden, Secretary, Government Bengal.)

[This wish, expressed in 1866, has not been fulfilled even at the present time. J. H. T. W.]

9. "The abuse of intoxicating drugs, especially of ganja, is answerable for 46·5 per cent. of the admissions; amongst the rest 3 were unknown, 3 were attributed to starvation, the rest being due to moral causes, such as grief, anger, fright, and religious excitement.

"I fully believe that the excessive use of ganja or spirits may lead to insanity, but I am not prepared to give my adhesion to the opinion that the moderate use of opium has any evil effect on the brain. I believe its action to have a directly opposite effect, for whilst other stimulants deaden the intellectual faculties and excite the passions, opium calms the passions, and healthily exalts the intellectual and moral faculties.

"Re-admissions.—There were 3 re-admissions; 2 of persons discharged cured in 1865, and 1 who was discharged cured in May 1866; one of the 3 was addicted to the excessive use of ganja, and another to muddut; there is no record that the third was addicted to the use of any intoxicating drug." (N. Jackson, M.D.—*Annual Report, Cuttack Lunatic Asylum*, for 1866.)

10. "As in former reports, the largest proportion is ascribed to indulgence in ganja. The ratio from this cause in the last five years has been as follows:—

In 1863	.	.	.	.	.	30·5
1864	.	.	.	.	.	49
1865	.	.	.	.	.	46·8
1866	.	.	.	.	.	38·9
1867	.	.	.	.	.	35·7
Average						40·1

"Indulgence in ganja, however, is always associated with other vices, such as spirit drinking and debauchery. The outbreak of mental disease cannot, except in a few cases, be referred to this narcotic alone. The return is more correctly a record of the number of ganja smokers among the lunatics.

"Statement No. 6 shows the trades or occupations of those admitted during 1867. The largest number was furnished by those who engaged in

domestic service, including those employed under European and Native masters. Twenty-one, or 27·2 per cent. were servants. In former years this proportion was only 8 per cent. This rise is due to the irregular habits and debauched lives led by Mahomedan servants, more specially by those serving in large towns. A second cause is the shameful practice followed by rich Natives of keeping a servant, generally a boy, who is forced to intoxicate himself and perform indecent dances, not as a warning to others, like the helot of old, but as an entertainment for his master and his companions. One of these miserable creatures was admitted during the year." (James Wise, M.D.—*Annual Report, Dacca Lunatic Asylum* for 1867.)

11. "The excessive use of intoxicating drugs, ganja specially, has contributed 22 cases, or 44·9 per cent. of the number treated. Of the narcotics used, dhatura has on two occasions been noted among the exciting causes. I allude particularly to this drug in connection with the case of Bunkall who was admitted in August under the following circumstances:—

"He had been an Inspector in the Irrigation Works six years, always bore a good and upright character, and had given uniform satisfaction, so much so that when one of the Executive Engineers was absent on sick leave, Bunkall was placed in charge of extensive and very important works; previous to this he was already doing the work of another subordinate, so that at one time he was doing the work of three men. Mr. Bunkall's previous health had never been good; he was subject to spasmodic asthma; during the damp weather it was so bad that his medical attendant recommended him to live two miles away from his works, and among other remedies ordered the dhatura to be smoked. Bunkall derived so much benefit from this that he resorted to it on every occasion he was distressed. Tobacco was also freely used, but never with the dhatura. The leaves of the plant were chiefly employed. For six months he continued in this habit, on some occasions smoking two or three pipes a day; about this time he was heard to complain of pain and pressure on the head. Here, then, were two exciting causes: excessive mental and bodily occupation, and secondly, dhatura-smoking. The difficulties of the case were, that when relieved of some of his work on giving over charge, he suddenly burst into a fit of craziness, and declared he was poisoned and surrounded by conspirators. For the first two months of his stay in the Asylum, he lost greatly in flesh and was violently maniacal; official visitors and others who had seen him on these occasions were struck with the change in his condition, and had no doubt of his insanity. For some days he was so morose that he refused all food, and had to be fed by the stomach pump. He slowly improved, but had two or three relapses. Since then he has steadily recovered, but not sufficiently to justify his discharge. Orders have been received to transfer him to Bhowanipore, where he can be better treated than in an asylum in which no provision is yet made for European cases.

[This patient was admitted into the Bhowanipur Asylum on the 22nd January 1868.

"January 25th: Appears perfectly intelligent and rational still, and his religious views seem to have less possession of him; employs himself painting." Left the Asylum quite sane on the 14th March 1868.—J. H. T. W.]

"We are aware of the powerfully deleterious effects of all parts of the dhatura (*alba* and *fastuosa*) when swallowed. The narcotic irritant effects of the seeds especially have for a long time been the subject of a study in Indian Jurisprudence. But whether the habit of smoking parts of the plant, so highly recommended in bronchial complaints, has a further acting in disturbing the mind and predisposing to lunacy, is perhaps not so generally acknowledged. Natives believe firmly in its action in this respect. The question is an interesting one and worthy of further investigation." (D. D. Stewart.—*Annual Report, Cuttack Lunatic Asylum* for 1867.)

12. "The re-admissions were less numerous than usual. During the previous five years they averaged 17 annually.

"Of the re-admissions, one, a ganja-seller, came in for the seventh time. He was a thin, spare man, aged about 60 years, with a fair amount of intelligence and energy. Six were re-admitted within one year of their discharge, two within two years, two after four years, one after seven years and one after eight years. Of these 13 persons, six were addicted to ganja, four to ganja and spirits, two to spirits alone, and the habits of one could not be ascertained." (James Wise, M.D.—*Annual Report, Dacca Lunatic Asylum* for 1868.)

13. "Seeing that so many of the cases admitted into our Asylums result from over indulgence in ganja or bhang, and are not really cases of insanity, I find some difficulty in classing them, and accordingly venture to suggest that all such cases be included under the head of *Cannabism*; they are easy of recognition, and the following characteristics will assist in determining them. In a recent case the conjunctivæ are congested, the pupils generally contracted, and the countenance wears a peculiar leery look, which, when once seen, is unmistakable. The pulse may or may not be accelerated, and there is a marked unsteadiness in the gait; great volubility or continued indulgence in laughter or song. If the muscular system is greatly excited, there is a tendency even to rush wildly onwards in a straight line unmindful of intervening obstacles, and consequently severe bruises, especially about the shins, are often met with. These are indications to be met with in a novice, and I cannot find that there are any unpleasant after-consequences in coming out of the debauch, which, on the whole, seems to be a happy and merry state of intoxication. One woman, describing her sensations, said that she felt as if her spirit wished to pass upwards through the skull, and that her body longed to mount upwards as well.

Bhang drinking, as opposed to ganja smoking, seems to induce pleasant reveries, like those produced by morphia when the tendency to sleep is resisted.

It is enormously indulged in, far more so than ganja, but easily overlooked, owing to the absence of excitement. In the confirmed ganja smoker, there is greater stupidity and less excitement, a kind of maudlin intoxication with conjunctivæ markedly red. Two tests at once betray the habitué: by frequently rubbing up the ganja and tobacco in the left palm with the right thumb a corn is produced on the outside of the last phalanx, and if you place before him a chillum said to be charged with ganja, he will inhale the smoke with one long prolonged whiff, which would at once bring on coughing in the non-initiated. A confirmed ganja smoker has frequently dark, purple

lips, but the corn and inhalation will always reveal him." (R. F. Hutchinson, M.D.—*Annual Report, Patna Lunatic Asylum* for 1868.)

[This is a particularly interesting note and the name *Cannabism* would do very well for the cases of intoxication occurring after the excessive use of hemp drugs, either alone or as is frequently the case with small quantities (2-3 seeds) of dhatura. It would represent a condition which when occurring in spirit drinkers is called *Alcoholism*.

The ganja smoker no doubt produces a corn on the right thumb but the same corn occurs on the thumb of a man who only smokes tobacco. From my own observation, I think, too, that the long inhalation is only taken after a few short and sharp pulls have got the chillum well started.—J. H. T. W.]

14. "I have a few words to say regarding criminal lunatics. There has been an increase of late in the number of this class of insanes, and it has appeared to me, judging from their demeanour here (many of them), that it would be as well for those whose duty it is to pronounce on the sanity of these individuals to recollect (Medical officers, Juries, and Judicial officers) that cerebral excitement resulting from the abuse of intoxicating liquors and drugs is not insanity. If an Englishman gets drunk, and in that state commits a criminal act, he is held responsible for it; and if he has committed murder in his state of excitement, he is hung. But a native of India indulges in an intoxicating drug which he knows will produce maniacal excitement and he escapes all future punishment (except confinement in a lunatic asylum) on the ground of insanity. The drunken native is no more mad than the drunken Englishman: why then this difference in the punishment awarded? I think I could point out several (so-called) criminal lunatics at Dullunda who have never shown any signs of insanity, and who have never been insane, though they have suffered from the stimulating and destructive effects of bhang, charas, or other intoxicating agent." (G. Saunders, Deputy Inspector-General, Bengal.—*Inspection Report, Dullunda Asylum*, 1870.)

[I entirely agree with the general opinion expressed in this extract, and I fail to see why intoxication from hemp drugs is not punished. When a native has willingly indulged in intoxicating drugs and in his intoxication commits any crime "he shall be liable to be dealt with as if he had the same knowledge as he would have had if he had not been intoxicated" (Indian Penal Code, section 86). Further, if in these cases proper attention were paid to section 510 of the Indian Penal Code, a large number of persons said to be intoxicated with hemp drugs and accused of "mischief," "theft," "simple assault," "trespass" or "lurking house trespass," etc., would be summarily dealt with instead of being confined in an asylum at the expense of Government, i.e., the tax-payers.—J. H. T. W.]

15. "Table No. 4 shows the attributed causes of mental diseases. Of 312 patients, no less than 123 are alleged to have become insane from ganja smoking and drinking. Of these, some have been discharged cured and many more are now nearly well, and will soon be turned out to resume their vicious habits. It is much to be regretted that so large a number of dissipated and miserably debauched creatures should annually be able to escape all punishment and become, as lunatics, burdens on the State. Whenever it is possible,

the cost of their maintenance is recovered from them or their friends; but justice seems to demand something more than this, even though the difficulties of the law may stand in the way" (H. C. Cutcliffe, F.R.C.S.—*Annual Report, Dacca Lunatic Asylum* for 1869.)

16. "The statement of re-admissions has little or no technical interest. In many of them recurrent insanity means only repeated intoxication. In others re-admission means the return of an acquitted criminal, who had been discharged to take his trial, and whose proper place would be among the cured; and a third group is composed of persons removed by relatives and brought back from difficulty or expense in managing them at home. This is an illustration of the manner in which, with a population composed of classes which have little or nothing in common, figured totals and mean numbers designed to represent collections of simple and similar facts in the life of each, may become mere heterogeneous aggregates of dissimilar units." (A. J. Payne, M.D.—*Annual Report, Dullunda Lunatic Asylum* for 1871.)

17. "The case returned under this head [acute dementia] was a domestic who had smoked ganja to such excess that reason disappeared and left him a mere animal in his habits. He, however, made a rapid and satisfactory recovery.

"Under the head of ganja the largest number are as usual included. The ratio this year is less than formerly. An endeavour has been made to distinguish between the occasional consumer and the habitual smoker. The former cannot properly be classified in the same list with the latter, yet in this asylum it has been the practice to do so. The ganja smoker who really appreciates its value, never becomes a spirit drinker. Spirituous liquors do not produce the sensual intoxication he desires, and the after-effects are not pleasurable." (James Wise, M.D.—*Annual Report, Dacca Lunatic Asylum* for 1871.)

18. "Fifty per cent. of the insanes are set down as 'cause unknown.' This is rather opprobrious, due doubtless to the cause at the time of admission being undiscoverable, or rather to its being left to those whose report obtains the Magistrate's order to transfer the patient to an asylum." (J. Coates, M.D.—*Annual Report, Moydapur Lunatic Asylum* for 1871.)

19. "The number [of cases] attributed to ganja is 169 out of 230 admissions, in which a cause was known, but it may be that it has become the habit to attribute insanity to ganja. The Lieutenant-Governor would be glad to have it specially noted in the reports if there are generally good grounds for setting down this drug as the cause in so many cases. The reasons for the belief should, if possible, be stated." (*Government Resolution on Asylum Reports*, 1871, Bengal. Sd. A. Mackenzie.)

20. "A true knowledge of causation of insanity can only be obtained from a very careful investigation of particular cases and their antecedents, and an extensive knowledge of the social peculiarities and practices of individuals and communities. Observations, such as Drs. Wise and Coates have recorded, contribute more to the elucidation of the causes of insanity than any number of 'tables' which have an appearance of precision, but are really most inaccurate and unworthy of trust. Statement No. 10 shows the usual large proportion of cases attributed to the use of ganja and spirits. The remarks of Drs. Coates and Wise would go to show that Indian hemp is in many cases erroneously

credited with madness otherwise caused. It would also appear that this drug has little or no influence as an incentive to crime; and the figures given in Statement No. 10 show that the proportion of ganja-caused insanity among criminals is less than among non-criminal lunatics. No doubt, as Dr. Wise states, thieves and murderers smoke hemp in order to nerve themselves to criminal deeds previously resolved on, but the drug does not appear specially to arouse any homicidal or criminal propensities." (J. Campbell Brown, Inspector General Hospitals, Bengal.—*Annual Report on Asylums*, 1872.)

[Many acts of violence committed by persons intoxicated either with bhang or ganja represent merely the uncontrolled action of the animal passions. The controlling power of the higher nervous centres once removed, by hemp drugs, alcohol, or anything else, the individual will either become quarrelsome and violent, or melancholic and maudling. There is not in my opinion any specific property in hemp drugs which incites to violence or crime.—J. H. T. W.]

21. "Although a cause has been assigned in all but 20·6 per cent. of the cases, it is impossible to place much reliance on the correctness of the statements sent in by the police, for it is to them we have to trust for obtaining the little information we possess.

"An attempt has been made this year to distinguish between those cases of insanity clearly due to ganja smoking and those in which the use of ganja has only been occasional, and therefore insufficient to excite insanity. The attempt has not been successful. For want of any other reason, it has been necessary to enter under the heading ganja several who were merely reported to have indulged in its use. In 1871 there were returned 37·2 per cent. of the total treated under the head of ganja. In 1872 the proportion was 31·60, namely, 25·26 males and 3·34 females.

"I believe that ganja is less deleterious than is generally supposed, and that insanity is comparatively as rare among the ganja smokers as among persons who take a daily allowance of spirits. Like drunkenness, ganja produces physical as well as psychical effects. By causing irritation, and probably changes in the nutrition of the brain, it gradually undermines the constitution. Its effects on the digestive organs, however, are less perceptibly injurious than are those of spirits. By exciting the emotions, it enfeebles the mind, and by the loss of self respect, it incapacitates the individual for discharging his usual avocations. Poverty, and all the anxieties which accompany an irregular life, oblige him to drown care in deeper intoxication, which sooner or later ends in madness.

"Among those classes of natives who spend most of their time in smoking the weed, madness is exceedingly rare. With them ganja smoking is an incentive to religious abstraction, and its unlimited use is a sure sign of religious sincerity.

"The Ramawats, who are the greatest smokers in Eastern Bengal, seldom, if ever, become mad. They, as well as other natives who exceed in smoking ganja, invariably live very well; and they maintain, that as long as plenty of food is taken, its effects are innocuous.

"The diet of a Ramawat usually consists of milk two seers (4 lb), ata 1½ lb, ghee four ounces, and vegetables and fruit *ad libitum*. During the last six years none of those luxurious mendicants have

been admitted into the asylum, although they are very numerous in the city of Dacca.

"An excessive indulgence in ganja, by those unaccustomed to its use, will generally be followed by insanity; but like dram drinking, as long as the digestion remains good, it may be taken daily, in gradually increasing doses, without much injurious effect.

"A person who indulges in ganja, unless he be a religious mendicant, is stigmatized as a reprobate. The vice grows upon him; he neglects his family and his business, falls into irregular and disorderly habits, which alternate with periods of self-reproach and mental depression.

"It is from among the labouring classes that the lunatic, mad from the effects of ganja, comes.

"Of the 93 lunatics treated during 1872, and whose insanity was referred to ganja, 67, or 72 per cent. were Hindus, 25 Muhammadans, and one was a Native Christian. Sixteen of the 25 Muhammadans came from Dacca or its neighbourhood.

"I do not believe that ganja smoking is an incentive to crime. In the records of this asylum there is no mention of any crime having been committed while the individuals were under the influence of hemp.

"In a special report forwarded to Government in December 1871, it was shown that of 99 criminal lunatics admitted between 1861 and 1870, 89 had their madness referred to ganja smoking; but that in no instance was it alleged that the crime was committed while the individual was under the effects of ganja.

"During the past year, four criminal lunatics were admitted whose insanity was referred to ganja smoking. They were all Hindus. One was charged with rape, one with theft, one with murder, and one with grievous hurt.

"That many ganja smokers become criminals is not to be wondered at.

"Few, if any, dacoits are to be found who do not make use of the weed to inspire them with false courage, but it is because they are thieves that they do so and not because being smokers of ganja they are thieves. The history of the use of the hemp corroborates this. It has invariably been used to nerve a man to perpetrate a deed which he has already resolved on doing, and, as the Ramavats hold, to impress on the memory a train of thought that has already been pondered over." (James Wise, M.D.—*Annual Report, Dacca Lunatic Asylum for 1872.*)

The Annual Reports for the following 20 years repeat these opinions.

From these extracts it will be seen that for a period of 30 years hemp drugs when abused have always been credited with the power of producing an insanity of various types. Generally a transient mania or melancholia or an acute dementia (Dr. Wise, Ex. 17). Before formulating any definite conclusions on this question, if such be possible at all, I would like to point out some of the difficulties under which all Superintendents of Asylums have suffered with regard to patients admitted for "*Ganja-insanity*." The patients belong nearly always to the lower and grossly ignorant classes, to whose minds the relations of *cause and effect* except in very ordinary affairs of life are more or less unknown, and anything outside their ken is generally given up as unknowable. When pressed for reasons they give such as

are foolish or wilfully untrue. Little then is likely to be obtained in the way of information from the friends of the lunatics, if indeed they are ever questioned. In certainly over 50 per cent. of the insanes admitted into Asylums as wandering lunatics under sections IV and V of Act XXXVI of 1858, or as so-called criminal lunatics under the provisions of Act X of 1822, the descriptive rolls contain no mention of relatives. The descriptive rolls (Forms 3 and 4) are filled up, as a rule, by a native police inspector on the information of a native policeman. These men know from experience that unless they make these rolls fairly presentable they will be returned from the Asylum to the committing Magistrate or Commissioner of Police, and that these officers will in their turn call for more information from their subordinates. To escape trouble and worry the police are therefore averse to entering the names of relatives (who might be called upon to contribute to the maintenance of the insane person), and are in the habit of accepting ganja, bhang, etc., as convenient causes of insanity which have long been permitted to pass as probably correct. The Medical Officers in charge of lunatic asylums have long suspected this to be the case (Ex. 1, 2, 8, 13, 18, 19, 20, 21). Let it be granted, therefore, that want of accuracy in ascertaining a cause renders about 50 per cent. of the cases of ganja insanity doubtful: it is not necessary to suppose that these insanes never used hemp drugs at all. They may, and probably do, represent persons insane from other causes who are known to have used hemp drugs occasionally or even habitually. In a certain proportion, too, it is not improbable that, owing to the fact that these persons are of a neuropathic diathesis, and in them a tendency to insanity exists, and has always been latent, hemp drugs in excess, or even in quantities which would not damage a man of robust nervous constitution, have acted as an *exciting cause*, making manifest a mental weakness which might not have shown itself in the absence of such indulgence. "What is one man's meat is another man's poison." Granting all this, we are still left with a number of cases in which the abuse of hemp drugs, either alone or combined with dhatura or spirits, has produced a violent and prolonged intoxication followed by a demented, maniacal or melancholic condition (see extracts and asylum cases). In these cases recovery takes place in a very short period indeed, in many of them the individuals are sane when they reach the asylum. (Ex. 13, 14, 20, etc.) A nominal roll has been prepared in the Dullunda Asylum for the past five years, and from it I find that of the 108 persons admitted whose insanity is put down to ganja or bhang, 8 are distinctly stated to have been sane on admission to the asylum. All these persons remained sane. I have investigated particularly the cases admitted during 1891 and 1892 and am further of opinion that the number given (8 for five years) does not represent the total of those who were sane on admission, and that therefore there can be no doubt that a certain proportion of the cases admitted are not cases of insanity but, if rightly reported in the first instance, merely cases of intoxication which should never have been sent to an asylum at all (see extracts). Although, as I have already admitted, we seldom have good proof that the so-called "*Toxic insanity*" is due to the abuse of hemp drugs, there is another feature in these cases which points to a causation which is transient, and from which recovery is rapid. The average period under treatment in the asylum at Dullunda of 55 cases discharged

cured during five years (1888-1892) varied from 3 to 10 months, and many of these were kept under observation for some time after they had been pronounced sane. Of the 108 cases admitted, more than half recovered very quickly, and this points to some cause easily removable. These figures include a few re-admissions of persons previously treated for insanity, due to the abuse of hemp drugs (Ex. 9, 12, 16). With regard to the patients who do not recover, I think they probably represent, as pointed out by Dr. Wise (Ex. 10.), a number of insane persons who may or may not have used hemp drugs.

As to my personal knowledge of the effects of hemp drugs, I have already given instances to the members of the Commission who visited the Dullunda Asylum on the 14th and 18th of August 1893. It would serve no useful purpose to quote the cases again.

In conclusion I think it may be fairly stated:—

1. That hemp drugs are very largely used throughout Bengal, smoked as ganja and charas; drunk as bhang and siddhi or eaten as majum. The smoking of charas and the eating of majum are not common.

2. Among healthy persons ganja, smoked alone with tobacco or with a very small addition of dhatura (two or three seeds), produces a condition varying from mild exhilaration to marked intoxication. The violent intoxicating effects are less marked, or not seen at all, in persons having a regular and wholesome supply of food (Ex. 21). Much the same may be said of bhang, etc.

3. Among persons of weak mind or with a marked neurotic tendency even a moderate quantity of hemp drugs may so increase the insanity evident or latent as to make such persons violent, morose or melancholy according to the neuropathy with which we start. The presence of adulterations, such as dhatura, will increase these effects.

4. Abuse of hemp drugs, especially when adulterated with dhatura, will produce, even in healthy persons, a very violent intoxication simulating mania, or may lead to a morose melancholic condition with outbreaks of irritability. These conditions are generally of short duration and the patient ultimately recovers. So common is absolute recovery that I think when a patient, confined in an asylum for the treatment of insanity said to be due to the abuse of hemp drugs, does not recover within 10 months, the drugs were possibly only the exciting cause, and that we are dealing with an individual who was either insane previous to his use of intoxicating drugs, or with one in whom latent insanity has been roused into activity by the irritating effects of excess of ganja, bhang, etc.

Further Statement put in by DR. WALSH.

As regards the *post mortem* appearances in cases where the insanity has been ascribed to the abuse of hemp drugs, I find that from the beginning of 1890 to the present time four deaths have occurred among supposed "ganja-insanes."

1. *Ratigen Gossain*, aged 31; admitted into the Dullunda Asylum 5th May 1890. Was violent, dangerous and dirty in habits, but fairly coherent at times. He did not improve; and though the acute maniacal stage passed off, he remained always silly, demented, dirty in habits and somewhat uncertain. In his descriptive roll he was stated to have been insane for 13 years. The paroxysm of mania which caused him to be shut up in the Dullunda Asylum in May 1890

was possibly excited by abuse of hemp drugs; but I think there can be little doubt that the abuse of hemp drugs was not the original cause of his insanity. A more careful search into the history of such cases is desirable. In 1893 his bodily health became very bad, though no marked symptoms of disease were noted. He died on the morning of the 26th March 1893.

Post mortem.—Feet and legs œdematous; body very thin and emaciated; about 4 pints of serous fluid in the peritoneal cavity. *Heart* small, and muscular tissue somewhat pale; valves normal. *Lungs*: signs of old pleurisy and adhesions over right lung; lung tissue normal; left lung not adherent. Some hypostatic congestion at the bases of lungs. *Liver* contracted; Glisson's capsule generally thickened and increased fibrous tissue shewing signs of cirrhosis. *Spleen* hard; otherwise normal. *Kidneys*: right kidney pale and undergoing fatty degeneration. Pyramids apparently healthy; capsule thicker than usual, but not adherent; left kidney as right. *Intestines* generally very pale; one or two congested or faintly ulcerated patches (the man had passed some round worms in February 1893) in the small intestines; no entozoa.

Brain.—No thickening of the meninges and no signs of meningitis; brain tissue somewhat soft but otherwise normal; no hæmorrhages or local changes; grey matter in normal proportion.

Weight of organs.—Brain, 49 oz.; right lung, 14 oz.; left lung, 13½ oz.; heart, 5 oz.; liver, 22 oz.; spleen 6½ oz.; right kidney, 3 oz.; left kidney, 2½ oz.

Cause of death; cirrhosis of liver and anæmia.

As regards this and subsequent cases I must mention that no microscopic examinations were made. The Superintendent rarely has the necessary leisure for such important work, while his assistants do not possess the necessary knowledge of histology and technical microscopy.

2. *Mongla alias Mohomed Syed*, aged 45; admitted 22nd June 1892. Said to have been insane for four months and his insanity was stated to be due to "ganja smoking."

There was nothing very noticeable about his case. He was in bad physical health, and died on the 22nd August from the results of a bad attack of dysentery. His brother removed the body and declined to allow a *post mortem* examination to be made.

3. *Mihir Lal De*, aged 22; said to have been insane for eleven months; cause ascribed "ganja-smoking." Was convicted of theft and sent to Hughli Jail, where his insanity became marked and led to his transfer to an asylum. Remarks on certificate of insanity:—"(1) General vacancy of appearance; (2) uncleanness in habits; (3) destructiveness of Jail property; (4) at times silent, muttering fits; (5) occasionally boisterous, incoherency of speech." The man while in the Dullunda Asylum, into which he was admitted on the 30th September 1892, was melancholic, sometimes with mild outbursts of excitement or weeping. The case did not improve. He died of cholera on the 4th January 1893.

Post mortem.—Body well nourished; *rigor mortis* slight in upper extremities; well-established in lower.

Brain.—Weight 43 oz.; both membranes and substance of brain congested; lateral ventricles contained a very small quantity of fluid. Brain substance firm. *Heart* weighed 8 oz.; chambers of both sides contained dark blood and clots;

valves healthy. *Liver* weighed 35 oz.; gall bladder full of bile, normal. *Spleen* weighed 8 oz., slightly enlarged; *right kidney* 2½ oz., *left kidney* 2½ oz., slightly congested; capsule easily separated. *Bladder* contracted and empty. *Intestines*: congestions all along both small and large intestines, except portions of upper and lower ends. Small intestines contained thin, yellow offensive fluid; large intestines thicker, darker and larger quantity of fluid than the small intestines. No worms. *Lungs* both adherent to chest walls; gorged with dark blood.

4. *Bolai Chand Dey*, aged 27; addicted to excess in ganja and alcohol for 18 months. Sent to the Dullanda Asylum 20th May 1893. Remarks on certificate of lunacy:—Talks incoherently. Is at times violent. Is at times very boisterous. He is indecent and dirty in his habits. Has a biting propensity.

On admission to the asylum the man was noisy and violent, sleepless, and refused food. Treatment with sulphonal and morphia calmed him somewhat, but he passed into a state of low delirium and died at 5 P.M. on the 23rd of May. He was removed to the hospital on admission.

Post mortem.—Body well nourished; *rigor mortis* well marked. *Lungs*, both congested. *Right lung* 39 oz., *left lung* 26 oz. *Heart* 10 oz., normal; valves healthy. *Ante-mortem* clot of small size found in the right ventricle passing into the pulmonary arteries. *Liver* 57 oz., congested; otherwise normal. *Spleen* 6 oz., normal. Both kidneys (right 5 oz., left 5½ oz.) congested; capsule easily removed. *Intestines* slightly congested throughout. No ulcers or parasites.

Brain 46 oz.; membranes deeply congested; sinuses full of dark blood; brain also congested. *Puncta* well marked; no other signs of disease or any lesions of brain substance.

The cause of death appeared to be in this case acute meningitis. The following notes are taken from his hospital bed-head ticket:—Temperature on admission 99° F.; violent and excited; struggled when fed and became unconscious with shallow respiration. Ice was applied to his head and a castor-oil enema given, and the man recovered consciousness after a few minutes. His conjunctivæ were congested and his pupils contracted. His temperature rose to 102° F. The enema acted and brought away lots of scybala. He remained in a somewhat comatose condition from the evening of the 20th, and on the 21st was treated with bromide of potassium, ice to the head and ice water enemata. On the evening of the 21st his temperature had gone down to 100° F. On the 22nd his condition seemed somewhat better. Temperature 99·6° F.; took some food and spoke, but was incoherent and delirious; sordes on teeth; at 12 A.M. the temperature rose to 102° F. Quinine and antepyrine were added to the bromide mixture and slowly the pyrexia abated; at 3 P.M. the temperature was 101·8° F.; at 8 P.M. 99·6° F. On the 23rd the temperature again rose to 102·4° F.; pulse soft and compressible; breathing difficult; the patient died about 4-45 or 5 P.M.

The symptoms all pointed to meningitis and the congested state of the vessels of the brain and membranes prove, I think, that the diagnosis was correct. The question now arises as to a cause. Was it ganja or alcohol, or the two combined? Could there be any other cause? I am inclined to think that this was a case of delirium tremens with pyrexia, and that ganja, if used, may or may not have added to the violence and excitement

present on admission to the asylum. I am bound, however, to record certain other features connected with this case.

When the patient was admitted, the Hospital Assistant who examined his body found the following wounds and contusions on him:—(1) Contused wound about 4 inches long on the right shoulder; (2) circular contusion right upper arm; (3) five contused wounds varying from 1½ to 3 inches on the back of the left shoulder; (4) one contused wound about 1½ inches long on the left elbow; (5) six irregular bruises on the back; (6) bruises on the right side of the abdomen and another on the left thigh; (7) a small swelling over the left parietal eminence. How he came by these injuries (some looked like contusions and abrasions from ropes) I cannot say, but he had evidently at some time received a blow on the head, and this might be succeeded by congestion of the brain and may have increased the gravity of his condition.

As regards the general appearance of the various organs of the body, and especially with regard to coarse lesions of the brain, these cases show nothing which could be ascribed to the action of ganja more than to other causes present. It is probable that as the insanity produced by ganja is never very prolonged, the hyperæmia occurring during the stage of excitement leaves no permanent mark on the brain tissue or membranes.

Oral evidence.

My length of service is ten years, six years of which have been in civil employ in Bengal. I have been Superintendent of the Bhawanipur cum Dullanda Asylums for two and a half years. I have had no special training in insanity beyond that acquired by a student attending his lectures in London. Apart from my asylum experience and my knowledge of the tincture of *Cannabis indica* as used in medicine and the two experiments with bhāng related in the Journal of Medical Science for January 1894, I have no knowledge of the effects of hemp drugs.

As to literature, there are O'Saughnessy's Bengal Dispensary, the Records of Macnamara's Experiments, brief and casual references to hemp drugs in works on insanity, and so on; but I know of no work in which hemp drug insanity is systematically treated.

In regard to dhatura, the Hospital Assistant, Trailakyanath Banerji, had told me, what I had heard from others, including lunatics, that it was customary to mix two or three seeds of dhatura with ganja for their use by smokers who use the drug to excess. I asked the Hospital Assistant to obtain me a sample of the mixture as actually sold to be smoked in this way. He brought me a small packet, and said he had bought it in the bazar in the shop. The packet contained just enough to fill one chillum and be one smoke for a person accustomed to this use. It contained dhatura seed. There were two seeds so far as I remember. It was shown as given to me to a Committee of this Commission at the asylum.

A man named Tulsi Malak was brought into the asylum on 13th August last. He was not insane when admitted. He told me that he had purchased a mixture of dhatura and bhāng to use it in a debauch with some fakirs. The result was insensibility, in which he went into a shop, where he was found sleeping and arrested. He was certified insane by the Civil Surgeon of Barrackpur and sent into Dullanda. This is also a case showing the preparation of this mixture for sale.

I should divide the effects of excess of ganja on the brain into these classes :—

- (a) Intoxication.
- (b) Mania.
- (c) Melancholia.
- (d) Dementia.

One cannot always say whether ganja alone produces these conditions or ganja with adulterations.

The condition that would be exhibited would depend very greatly on the nature of the person taking the drug. This refers to the stages (b), (c), and (d), not to the stage of intoxication.

In my asylum practice I do not often see the intoxication stage. That and the minor stage of mania are, no doubt, the condition of the cases which reach me sane, as well as of cases which, having recovered, are not sent into the asylum. Such cases are found chiefly in jail or the Campbell Hospital. I have, however, cases in the asylum. The intoxication of ganja seems to me different from that of alcohol, in that the former does not make a man "fuddled." It is rather a perversion than a suppression of the faculties. It would not last more than six or eight hours. This opinion, however, is based on very limited experience.

(b) The acute mania from ganja is brief, sometimes only two or three days; sometimes a week or longer. The limit is difficult to state; but a man generally recovers under two months. There is nothing diagnostic about the symptoms in these cases. So far as I know, you cannot distinguish it from any other form of mania. It is this stage which I compare with delirium tremens. I have no proof one way or other as to whether this would ever result from one dose of ganja; but I think it extremely unlikely. I think the only analogous symptoms in this mania and delirium tremens are the excitement and loss of control over the intellect. I have not noticed the delusions which are so common in delirium tremens. I do not remember that any instance has come under my notice in the asylum of a patient suffering from this mania having suicidal or homicidal tendency, but the certificates that accompany these men contain facts indicating such tendency. I think it would be extremely difficult, except from objective symptoms, such as smell of alcohol and finding it in urine, etc., to differentiate this mania from delirium tremens, although there are usually special delusions in the latter. I do not think that cases of transient mania attributed to hemp drugs can be differentiated from those due to other causes in any way except by enquiry as to history.

There is nothing special about the symptoms of the melancholia or dementia attributed to hemp drugs by which the cause could be determined.

After the acute stage is past, the recovery passes through a stage of depression which is melancholic in character. The melancholia may be a stage in recovery, or the stage in which the patient is when he reaches the asylum, and which, in that case, would be shown as the initial stage in our books. I do not think that the acute mania settles into any form of chronic mental disease where there is no factor or predisposing cause other than the ganja. So the mania, melancholia, and dementia to which I refer are all temporary.

When I find a chronic case in the asylum attributed to ganja, I believe there is another factor existing in the subject. These chronic cases may

be chronic mania, chronic melancholia, or chronic dementia. This opinion as to causation of these is based on my knowledge of the drugs and also on analogy with alcohol. We know that alcohol is far more likely to produce insanity in a subject with a tendency to nervous diseases than in a healthy subject. Each of these three classes of chronic mental disease attributed to ganja exhibit the same features as the same class when due to other causes. I do not think that the presence of ganja as a factor in insanity makes the character of the inmates of asylums in this country differ from those elsewhere, except perhaps in the proportion of rapid recovery. The racial conditions alter the characteristics of insanity in different countries. Taking the general appearance of an asylum here, and contrasting it with asylums at home, you would be struck with the quiet and tractable demeanour of the patients, only a few may be laughing or shouting, but quietness prevails. It is cheerful and despondent quietness in equal degrees perhaps. Chairomania or "Happy Mania" is exceedingly rare in our asylums in India. The principal difference between English and Indian asylums seems to me to be that in the former the character of the insanity is more marked, the melancholia is more melancholic, and the mania more violent. I speak only from knowledge of Bedlam at home and my own European asylum here.

In regard to intoxication I have strongly expressed my view in my paper that the law should differentiate between intoxication and insanity from ganja, and that ganja intoxication should be treated as alcoholic intoxication. I do not regard the asylum as a punishment at all; and I do not think that a man who committed a criminal act under the influence of a drug taken voluntarily should be there. It is not my opinion from experience that it is either dreadful in itself or possibly disastrous to a man's mind, to have to herd for years with lunatics though sane. And it is not on that ground that I propose the change.

As to procedure in reference to cause I have stated my views very fully in my paper. I have only to add that at present Statement VII showing "Cause" is based entirely on the statements in the descriptive rolls, and on these alone. The entries in regard to type in Statement VI are from the asylum register, and show the type under which I, as the Superintendent, classified the insanity. As to cause I have no opportunity of judging beyond what the descriptive rolls give me. I have no opportunity of inquiry, and there are no diagnostic marks. I diagnose "toxic insanity" solely from the descriptive roll. I put the word "toxic" before mania or melancholia or dementia, as the case may be, from the history of an intoxicant as the cause. There is a strong desire to keep the entries under "Unknown" in Statement VII as few as possible. I may add that revised forms of Statements VI and VII have been drawn up by a committee of which I was a member and are now under the consideration of the Bengal Government.

I have stated in my paper that the Statement VII shows the number of ganja smokers in the asylum rather than the number insane from the use of ganja. By this I certainly do not mean that ganja may not cause insanity; but that practically all the information I get from the descriptive roll is that the man used the drug. This statement that a man is addicted to the drug is not itself wholly trustworthy. By that I mean that a man

inquiring might make a mistake about any fact about a lunatic. My opinion in regard to this would depend on a consideration of all the circumstances under which the information was collected. My experience leads me to conclude that amongst the classes from whom the patients in our asylums are usually taken there would be no hesitation in admitting the use of the drug.

My attention has been directed to hemp drugs ever since I have been in the asylum. My attention was specially given to the matter of types some years ago. But my attention has been specially directed to the subject generally, and I have most carefully studied it, and my views have been formulated, during the last eight months.

113. *Evidence of SURGEON-CAPTAIN D. PRAIN, Curator of the Herbarium, and Librarian, Royal Botanic Garden, Calcutta.*

1. I was instructed by the Government of Bengal in February 1893 to submit a report to the Board of Revenue, Lower Provinces, on the cultivation and use of ganja. I was on deputation for this purpose during the period 18th March to 17th June 1893. I had not, previous to this deputation, been specially interested in hemp; till then I had only possessed a fairly complete knowledge of the botanical and a general average acquaintance with the physiological and therapeutic characters of the plant and its products.

2. The name ganja is in certain parts of the Western Himalayas applied somewhat differently. (See my *Report*, page 10.)

19. I have found great difficulty in meeting with any instance of the use of charas in Bengal. It may indeed be said not to be used in this province. My only instances have been among the class of 'Kabuli' merchants, and even among them its employment is rarely admitted; nor can I say whether its use is general among the class.

I have heard of ganja being used for drinking in Calcutta, but never have met an authentic instance.

23. I do not know. It was 200 years ago so used on the Malabar Coast; it would be well perhaps to find if in this region the use still persists. I have been unable to find any instance of the use in Bengal.

28. My information on these points has been derived from enquiries, and does not result from direct personal observation, so far as excessive consumption is concerned; it therefore partakes of the nature of hearsay evidence, and is not admissible.

Habitual moderate consumption of bhang may, I think, be put down at $1\frac{1}{2}$ tolas per diem. Of ganja, at from 30 to 60 grains per diem. Of charas, I cannot state even an opinion.

Excessive consumption, as I interpret the word 'excessive' (my *Report*, page 69), is unusual.

29. My knowledge of this part of the subject is derived from information obtained by direct enquiry, and is not therefore of the nature of directly hearsay evidence. It is contained in my report.

Datura and opium are given to increase the known narcotic effect of hemp.

Nux-vomica and cantharides are given to increase the supposed aphrodisiac property of hemp.

Betel-nut (aniseed, pepper, and the other ingredients of a simple bhang massala are used for the same purpose) is given to counteract the effects arising from the indigestible nature of the substance when taken internally.

30. (a) I have not given attention to this point, but I have seen so few cases of excessive

use of the drugs that its importance did not occur to me. So far as moderate use of ganja is concerned, the point is of no importance; the substance is smoked when required, whether the smoker be alone or in company. The moderate use of bhang is essentially a "social" act.

(b) The use of ganja is confined, I am told, mainly to the male sex, and is fairly general among grown men. The use of bhang is so much concealed, even when the use is moderate, that I cannot give an opinion as to whether it is used by women in Bengal.

(c) It is not usual for children to smoke ganja or drink bhang, or even to eat majum.

31. (a) Apparently so.

(b) Apparently not.

(c) I believe that there is a tendency in the case of the use of bhang for the moderate habit to develop into the excessive; but that in the case of the use of ganja this tendency hardly exists.

32. My information on this point has been derived from friends of my own among the native gentlemen of Bengal, so that it is inadmissible as evidence.

36. My information here has also been derived from native friends, and is again inadmissible as evidence. It is contained in my *Report* already referred to.

37. The effects of charas smoking do not differ from those of smoking ganja. The differences stated by many native authorities are imaginary. I mention this particularly, because it has become so much the habit to state these that some of my native friends, very intelligent men too, having been predisposed by what they have heard, actually think they have seen what they expected to see. Nor does bhang really produce 'different' effects from the other two forms of the narcotic; the same effects, excitement and narcosis, are in each case produced; in the case of charas and ganja (smoked), these occur more rapidly and pass off more quickly than in the case of bhang (drunk).

39. Yes; smoking ganja does not tend to develop into a habit of excess. It does not impair the digestive powers so much, if indeed it does so at all.

I have not met with a single case in my own practice or experience where the use by either habit of any hemp preparation has produced insanity. I have, however, to point out that it is now some years since I have come in contact with medical cases, and that my medical work in India has been entirely with a military, and never with a civil population.

40. (a) I do not know.

(b) I do not know. I have seen the fresh hemp

plant used as a medicine for cattle in Assam and in Bengal.

41. (a) Not directly, but indirectly by acting so as to allay fatigue and enable the natural digestive powers to act.

(b) Yes.

(c) I am unable to say.

42. Yes; I commenced my enquiry into the use of the plant with a preconceived idea, derived from copious assertion, that ganja was a pernicious drug, and that charas and bhang were harmless. I have found that charas and ganja are the same thing in reality, used in the same way, and that, therefore, general opinion was absolutely unreliable. I have been unable to find a single instance during three months' enquiry of any evil effects arising from the use of any of the three products of hemp.

44. Bhang appears in a moderate dose in a habitual consumer to act simply as a mild, pleasant sedative; it is not used with reference to the appetite for food; probably, if so used, it would allay hunger. [The increase of appetite that follows the consumption of the substance by one unaccustomed to hemp is only observed after the first few doses.] The effect of an ordinary dose passes off in a few hours. A certain amount of heaviness continues for some time longer. I cannot say whether the want of subsequent gratification produces longing or uneasiness.

Ganja moderately used is refreshing; it does not produce perceptible intoxication; it does not so much allay hunger as fatigue; it does not appear to create appetite; in most cases there are no visible effects, but the staying-power induced by a dose lasts for some hours; the want of subsequent gratification produces no uneasiness, unless there be a repetition of the conditions of exhaustion from exertion calling for a new dose.

45. I do not believe that the habitual moderate use of any of these drugs produces any noxious effects, physical, mental, or moral. I believe that it does not impair the constitution to smoke ganja, and I believe that the moderate use of bhang does so only very slightly. I think that, perhaps, the use of bhang does injure the digestion and impair appetite even when used moderately, but I am convinced that it neither causes dysentery, bronchitis, nor asthma. On the contrary, a preparation of hemp is very valuable in the treatment of dysentery. Bhang is said to impair the moral sense, induce laziness, and lead to habits of immorality and debauchery as well as to deaden the intellect and produce insanity. I do not believe that it does anything of the kind if taken in moderation, and am convinced that much confusion has arisen in considering this subject from the fact that the lazy, immoral, debauched, or criminal sections of the community are largely given to the use of bhang.

I have not met with any case of insanity in my own experience, which appeared to be due to the use of bhang or ganja. In the cases of insanity with a ganja history that have been considered by me, I have never been able to find out whether ganja or bhang was accused, and have been of opinion that the use of the drug by people whose minds were troubled, or perhaps even diseased, or whose minds were naturally deficient, has not been sufficiently considered.

46. Cases of the habitual excessive use of ganja are not known to me, except among the class of religious mendicants.

Habitual excessive use of bhang does impair digestion and thus injures health. It does not cause dysentery or bronchitis, but an excessive dose of the drug often leads to carelessness on the part of the subject as to his clothing, and the chills which often result from this unconscious exposure give rise to the attacks. The impaired general health renders the constitution unfitted to combat bronchitis, and the "asthma" which accompanies chronic bronchitis is one of the results. That true spasmodic asthma is ever induced by the use of bhang, I do not believe. The substance that is prepared from hemp which is of use in dysentery is an extract. The fact that this is useful in treating dysentery is of itself proof of the incorrectness of the idea that the use of bhang causes the disease. Once, however, dysentery has been induced by a chill, the use of bhang aggravates it in spite of the fact that extract of hemp is a remedy.

This is because bhang is taken as an emulsion of the leaves themselves, so that the surface of the bowel is exposed to the passage of small solid particles of vegetable tissue while it is in a state of inflammation. The irritation that results more than counteracts the soothing effect of the resinous narcotic matter the leaves contain.

47 and 48. I am unable to give an opinion on this point.

49. Ganja is not used moderately as an aphrodisiac. Bhang sometimes is. I cannot say if it is used by prostitutes themselves. I think not. But it is given by prostitutes to their clients. This use is more injurious than the ordinary use, because, though the substance has not in itself any specific aphrodisiac effect, it undoubtedly tends to assist the subject in the abuse of the virile powers. This abuse, and not the drug directly, tends to produce impotence.

50. I have not met with any case where ganja has been smoked to excess as an aphrodisiac. I should doubt any statement to the effect that it ever is so used owing to the physical difficulties involved.

The use of bhang and of majum in excess for this purpose is well known; but, as has been already said, the effect is indirect, and not really attributable to the drug.

56. On this subject I regret I am unable to give any direct evidence. Most of the information I have received regarding this matter has been of the nature of surmise.

57. Ganja, used as bhang generally is (by drinking); produces, when given in physiological experiments, exactly the effects produced by bhang, only these are dose for dose more intense from ganja. A small dose of ganja causes effects like a large dose of bhang. I have not met with cases of habitual use of ganja in this way, but I should view any statement that the effects of drinking ganja differ from the effects of drinking bhang with considerable suspicion.

Oral evidence.

I have been in the service since October 1884. From that time with the exception of about a year in military employ, I have been in special civil employ in connection with the Botanical Gardens. Beyond the examination of specimens of plants sent to me by the Board, I had no interest in the hemp plant—no interest in its physiological effects at all—previous to the inquiry I was called on to

make in 1893. I have no experience beyond that acquired in the course of that inquiry. I have nothing to add now to what I have written in the Report. I have made no systematic inquiry since then. I wished to make further physiological inquiries on my return from leave; but I found Dr. Cunningham had been asked to conduct experiments. In regard to the chemical part of my report, I was extremely disappointed, as it was only partial and inconclusive. At home I tried to get the matter taken up. I have received a letter from Professor Dunstane suggesting further inquiry in a manner and at a cost he indicated. I recommended a reference to this Commission and said I would mention the subject also. I put in his letter with a strong recommendation that some such steps as he indicates should be taken to complete the chemical inquiry which I regard as very important, both practically and scientifically. It would have great practical importance in connection with the use of the drug *Cannabis indica*, though not in connection with the questions before this Commission. As to myself, then, my views regarding hemp drugs are contained in my Report and my written answers to the questions of the Commission. I have nothing which I desire to add.

In page 62 of my Report I describe the effects of bhang (Chapter VI). I took bhang myself and observed the symptoms. The tendency to laugh was not marked. I was rather depressed, but this may have been because I was not well at the time. I experienced the thirst and increased appetite. I took the usual dose made in an emulsion as described by Hem Chandra Kerr (but without the spices) about a tola and half of dry leaves. I was rather disappointed with the result. I have also seen the drug taken by natives, men habituated to it, and seen the effects.

The experiments on monkeys and cats were conducted by me (page 64); but the difficulty of administering to the monkeys made the experiments unsatisfactory, so I recorded little about them. I have observed the condition of the pupil with human smokers, but have not seen dilatation with them; nor have I seen contraction. In regard to cats, it has to be borne in mind that they got very strong doses of the drug. Dr. Russell's experiments quoted by me at page 65 are, I understand, in addition to those conducted by him in Assam and quoted in the Assam Excise Report of 1881-82. My view in page 74 of my Report that a dose of ganja drunk is twice as strong as the same dose smoked, is based exclusively on Dr. Russell's paper quoted at page 65; for I have never inhaled ganja by smoking. My statement that ganja is five times as powerful as bhang is based on the quantity of resin obtainable. (Cf. also the remarks at the top of page 11; the remarks about charas there are quoted from Volume III of Dymock and Warden's *Pharmacographia Indica*.) His experiments with pure charas from Central Asia showed 75 per cent. of resin as compared with 25 per cent. in ganja (*vide* Table X on page 32 of my Report).

On page 75 the remarks about indigestion being traceable to hemp, especially bhang, are not based on the examination of many cases but on what I have heard of the common idea of people having pains and flatulence and so on and attributing them to the drugs. If this is so, I fancy it is due to indigestion caused by using so much vegetable matter. I have sought to accommodate with the slight effects I had seen the stories told to me in perfect good faith as to the evils resulting from the use of the drug. My comparison

between the effects of smoking and drinking hemp on page 75 is not based on observation of cases, but principally on hearsay evidence. It is based on an attempt to accommodate what I have learned from others with what little I have seen. I have seen many ganja-smokers, but I have not seen the same cases often. I have not observed the history of cases so as to observe the effects. I have seen for the most part people who smoked when they were tired. I have also seen the fakirs who have smoked largely. I have as a rule seen no effects except suffusion of the eyes. I saw a man in a frenzied condition only once among a company of fakirs. He was supposed to be possessed. I was told that his state was attributable to ganja; but I cannot put any reliance on the case, as I had no evidence apart from that statement. My knowledge of bhang consumers enables me to say that the darwans take bhang to a considerable extent; but that is the extent of my experience: I have only seen it among these darwans. I have not been able to get any native gentleman to admit the use.

The ordinary method of smoking ganja is inhaling from a chillum either direct or through the hands. I have neither seen a cloth used. The effort of inhaling is great. I was never able to inhale myself. A moderate smoker takes three whiffs at a time and that is all. That is the regulation dose. I have seen one man smoke by himself. I have more usually seen smoking in company. The three strong steady pulls are taken in succession by a man. He does not blow anything out till they are over. After his three whiffs he passes on the pipe to his neighbour. It does not come back to him again, so far as I have seen: the one set of three whiffs is all. Perhaps the reddening of the conjunctivæ is due to over-exertion in inhaling. I cannot say. I never saw any excessive consumers except a few fakirs. The excessive consumer smokes exactly like the others, but would take more than three whiffs and would take the chillum again and again. I have never seen tobacco inhaled in this way by natives. I have not been interested in this point. In my experiment with ganja, I used a chillum and took three whiffs, but could not inhale. There were no effects. What I used was unmixed ganja.

In my written answer to question 45, I refer to cases of insanity. I discussed the cases with Dr. Walsh and other medical friends. I had not the cases nor the papers before me.

APPENDIX.

Letter from Professor Dunstane put in by DR. PRAIN.

Dated 17 Bloomsbury Square, London, W. C., the 18th November 1893.

From—PROFESSOR DUNSTANE, Secretary, Pharmacological Committee of the Royal Society,

To—SURGEON-CAPTAIN DAVID PRAIN.

I much regret that we were unsuccessful in trying to meet when you were in town. I should like to have discussed this whole subject of Indian hemp with you and to have explained to you my difficulties in starting the chemical enquiry. I have already made preliminary experiments with medicinal preparations of the drug (made in this country), and I feel no doubt that I should be able to solve the problem of finding and defining the active constituent. The work would, however, be long and troublesome, even with the genuine

material which you kindly offer to supply. Moreover, there are no funds available here for chemical materials, apparatus or assistance. The very small endowment of the laboratory is entirely absorbed in carrying on the aconite research, in fact we are already in debt. I have discussed the subject of ways and means with many of those who are interested in pharmacological research and the suggestion has been made that the Government of India might be disposed to make a grant in aid of the special investigation, which is of so much interest and importance to the country. The work of ascertaining the precise mode of action on the body cannot be properly done until some pure chemical substance has been isolated. Perhaps you would be able to influence the Indian authorities to make some small contribution to the work. So far as I can judge, it would take about two years to complete the chemical work, assuming that I could have assistance with the purely routine work, and the cost could be defrayed by a grant of £500.

Several well-known scientific men have offered to use their influence with the Indian Government to induce them to make such a grant, but before any steps are taken I should like to hear from you what the best steps to take would be, and what likelihood there is of success.

I have been much interested in reading your voluminous report on the subject, which is of the greatest value to any one who is thinking of working on the subject. As regards the chemistry, the work is excessively difficult, and only those who have had special experience with such enquiries are likely to come to any definite conclusion. Many of those who have already dealt with this side of the subject are evidently not qualified for the task.

If you will kindly let me know what should be done, in conjunction with Mr. Huillon Dyer, I will take whatever steps you may recommend. It would be easy to get the Pharmacological Committee of the Royal Society, of which I am Secretary, to make a representation on the subject. Its members are:—T. R. Fraser, M. Foster, Lander Brunton, J. T. Cash, W. T. Dyer, H. E. Armstrong.

APPENDIX.

Further report submitted by DR. PRAIN.

Dated Sibpur, the 27th April 1894.

From—SURGEON-CAPTAIN DAVID PRAIN,

To—The Secretary to the Board of Revenue, L. P.

With reference to your No. 400B., dated 26th February, with reminder No. 104B. of 4th April and No. 120 of 20th April, I have the honour to say that I have delayed supplying the information called for, in the hope that I might be able to associate the results of my observations with those obtained by the Chemical Examiner to Government, as, without the latter, any report that can be submitted must be necessarily quite incomplete. The Chemical Examiner, however, has for many months been closely engaged in the examination of other samples of ganja than those belonging to the Board sent to him for report by the Hemp Drugs Commission, and as the reports for the Commission were more urgently called for than those for the Board, the examination of the samples referred to has of necessity had to stand over. As, however, I am about to proceed on furlough to Europe, I deem it my duty to submit

a brief report dealing merely with the physical condition of the samples.

2. The case of ordinary "flat twig" and ordinary round ganja may be first considered. The boxes containing these were opened by the Chemical Examiner, not by me; but that officer has very kindly permitted me to inspect the samples. The samples stored in the ordinary way in gunny, with straw, and placed in deal boxes with air holes bored at frequent intervals in their sides, were found to be in perfect order and were judged to be of excellent quality. Those, however, that had been tinned up were found to have a slightly different odour; not the characteristic odour of good round or flat ganja, but a distinctive and (as compared with the other samples) a slightly disagreeable smell. The smell is in fact that which characterises Gurjat ganja as opposed to Rajshahi ganja, and indicates without doubt the occurrence in the drug, when air is quite excluded, of some fermentation process. It will of course depend entirely on the result of the Chemical Examiner's chemical and physical examination whether ganja so tinned up may be said to have in any way deteriorated from the pharmaceutical and excise points of view. But there is no doubt that as a commercial article the tinned drug at the end of twelve months is not so valuable as the untinned.

3. As regards the ganja converted into chur and compressed into cakes, which I was able, through the kindness of the Collector of Excise, to examine, the same observations have to be made. The services of Mr. Siddons, Assistant Collector, were placed at my disposal; and Mr. Siddons not only accompanied me to the gola, but kindly arranged our visit for a day when there would be a number of dealers and users of ganja present, who might give a commercial verdict on the result of the experiments.

Those cakes that were stored in gunny, with straw, in the same way that ganja is usually stored, were found to be in appearance exactly as when stored.

The on-lookers readily recognised and distinguished the cakes of round and of flat ganja, and though they were not willing to admit that these "new-fangled" cakes were as good as ordinary round ganja of the same age, they were constrained to admit that the ganja in them was rather better than chur. For my own part, I felt inclined to agree with the dealers. These cakes had not quite the nice fresh distinctive smell of a good sample of round ganja, but there was no disagreeable smell; and the impression of dustiness which chur conveys was quite wanting. As regards the cakes stored in tin, however, the results were most unsatisfactory. The ganja of these had a very disagreeable smell when the tins were opened, the same fermentation smell (that of Gurjat ganja) mentioned in connection with other tinned samples, but much more intense. Whatever the results of its chemical examination may be, as a commercial article the ganja cakes kept in tins are valueless.

4. The process of fermentation that goes on in the tinned samples of the drug is most probably related to the moisture that the ganja originally contains. As has been said, the smell which indicates it was far more intense and disagreeable in the cakes than in the ordinary ganja tinned up a year ago. The cakes were made at Naogaon from ganja freshly made and just brought in for export, and they were tinned up on the spot. They most probably, therefore, contained more moisture than the ordinary round ganja which,

though it came from the same field, and was of the same quality, lay for a few days of the dry weather untinned up during the time of its transit from Naogaon to Calcutta, where it was tinned up. The rapidity with which ganja takes up moisture in damp weather, and parts with it in a dry atmosphere, has been shown in my report on ganja; and the difference in this respect, produced by a few days' exposure to dry air, has been great enough to make the quite fresh sample completely valueless, and only to slightly alter the character and appearance of that which had an opportunity of parting with some of its moisture. This leads, therefore, to a re-consideration of the question of time of tinning, or of preparation beforehand of the ganja before tinning it. As already stated in my report, it seemed to be essential for the success of any plan of storage that no preliminary preparation should be required. For, besides the labour involved in rendering the substance absolutely moisture-free before placing it in tins, it is not impossible that the mere process of drying it might alter its quality and power. It certainly would decrease its commercial value, since one of the essentials in a sample of ganja from a dealer's point of view, is that it shall be sufficiently "sticky" to make into a paste in the hand before being used; ganja that is perfectly dry loses this stickiness.

It is a common belief with ganja dealers that, as at present stored, the substance *improves* in quality during the first six months; it becomes, they think, less powerful when smoked, and improves, they think, in smell and flavour; after six months it deteriorates, still losing power till all is gone, and steadily diminishing in quality independent of its strength. Not improbably this opinion, which is founded on commercial experience, is sound; also from the physical and chemical point of view, though till the Chemical Examiner's reports are received, it will not be possible to say if it be absolutely correct. But correct or not, it is, simply because it is the commercial opinion, entitled to attention if not to respect, and it therefore becomes a question whether it would not be well to allow the drug to mature, so to speak, by becoming six months old before converting it into chur, making it into cakes and tinning it up. But this would defeat one of the main objects which the Board has in view—the reduction in bulk of the substance to be stored: for if the drug has to be kept six months before it can be dealt with, storage must be provided for the whole crop in the

state in which it appears when made under present conditions; and if this accommodation has to be provided, to begin with, the necessity for extra expense and trouble of reducing it in bulk seems less obvious. The question to be decided then is this: would it be less expensive to reduce the bulk, and consequently the cost of tin, etc., required for sealing up the samples, or less expensive to supply the larger quantity of tin required for sealing up the drug in its present unreduced state? And in the event of the former proving to be the less expensive course, would the saving effected repay the interference with commercial prejudices involved in placing on the ganja market an unfamiliar form of the drug?

5. The conclusion to which I am very reluctantly compelled to come is that the proposal to tin up samples of ganja, when newly manufactured, which commends itself at once from its simplicity, and from which I had hoped so much, must be definitely abandoned. At the same time I think that if the *whole* management of the ganja crop should pass into the hands of the Board, it would be advisable to convert the whole of both the round and the flat ganja manufactured into chur, and to compress this chur into cakes. This process does not affect, at any rate appreciably, the quality of the article, and as Naogaon ganja is the favourite kind with ganja consumers, it is obvious that if they can only get it in cakes, they will readily enough take it in that form. But it would be, in my opinion, *not* advisable, from what I have been able to ascertain as to the feelings of the dealers in, and consumers of, ganja, to attempt to place ganja cakes on the market alongside of the more familiar forms of the substance at present manufactured and sold. Finally, if the Board *does* take the whole management into its hands, and if it does convert the whole crop into these cakes, it might be advisable to consider the question of tinning mature ganja when at its best, so as to prevent the deterioration which ultimately takes place in the article; but it would be necessary, before proposing to adopt such a course, to have complete chemical reports, not merely on the samples which the Board has already submitted for report to the Chemical Examiner, but on those which have not been submitted to that officer. For example, the cakes in question, though they are noted in my former letters and on the boxes in which they are stored as requiring to be submitted for chemical examination after March 1894, are still in the golas.

114. Evidence of DR. S. J. MANOOK, Civil Medical Officer, Singhbhum.

1. All my remarks refer to the Singhbhum district.

2. These are the definitions used in this district. The plant is not known to the Kols (aborigines) and they have no name for it.

3. Does not grow in Singhbhum spontaneously. Singhbhum is particularly exempt from the hemp plant, and if it do exist anywhere, its presence is only that of an exotic clandestinely grown.

7. No.

12. I have no personal knowledge, but from enquiries hemp is cultivated in Keonjhar and Morhbunj for bhang and ganja.

13. Nowhere cultivated in this province.

18. Ganja and bhang deteriorate by keeping; a

mustiness or mouldiness is acquired owing to dampness. May be prevented from deterioration for a long period by being kept in shelves or almirahs in a well-ventilated dry room.

19. Charas is not used in this district. Generally ganja is used for smoking.

20. Charas smokers are not known here. Those addicted to the narcotic use either ganja or bhang.

21. Round ganja (Government supply) is the only kind procurable in the district.

22. Charas is not used in this district.

23. Bhang is used for smoking, mixed with tobacco by the poorer classes.

26. The few consumers that I have come across have been habitual moderate consumers of ganja or bhang or both.

29. Ordinarily tobacco with bhang or ganja. Dhatura is said to be used to increase the narcotic effects of bhang or ganja, but I have no personal knowledge.

30. I have never seen a female or a child as a consumer of ganja or bhang.

34. No privation whatever to ganja and bhang consumers. Those persons whom I have questioned seem to use the drugs for no special reason. I suppose it is a habit acquired by seeing some friend or acquaintance use them or for some ailment, real or imaginary.

42. Three persons, ganja and bhang consumers, lately examined with the following results :—

No. 1 has been consumer for 15 or 16 years. Uses Mohrbhunj ganja or bhang as it is cheaper than Government ganja, but is much weaker than the latter. Smokes twice daily morning and evening. Is in good health. Has had no bad effect. The use causes excitement or intoxication followed by drowsiness and lassitude. Effect lasts 2 or 3 hours. Discontinuation causes eyes and nose to water and has pains all over the body.

No. 2 uses Keonjhar ganja as it is cheaper, but is much weaker than Government ganja. Habit of several years' standing. Smokes with tobacco once a day in the morning. Good health. No bad effects.

No. 3 uses Keonjhar ganja as it is cheaper, but not so strong as Government ganja. Habit 10 years. Smokes with tobacco 4 times a day. In good health. No bad effect.

43. I believe so, so far as bhang is concerned.

44. See above.

47. No such hereditary habit has come under my observation, and my inquiries from my Hospital Assistants are also negative.

70. Consumers of these drugs, travelling through any of the neighbouring Native States where ganja or bhang is obtainable, usually bring away a supply for their own consumption, since the drugs are so very much cheaper than that legally obtainable. In a few instances the smuggled article is also intended for sale as well as for the consumer's own use.

115. Evidence of DR. CHARLES BANKS, Civil Surgeon, Puri.

Oral evidence.

I have been in the service as a Civil Surgeon two years, and in India three years. I do not think that I have enough of experience of ganja smokers to be able to give any information of much value regarding the effects of the drug. I have seen a good deal of smokers of late. But that has been only in shops which I have visited, and has therefore been only experience of the habits of those who use the drug as a vice, not those who use it for necessary or expedient stimulant. I speak of them as vicious, because they go to a shop to smoke, and because I was told they were confirmed smokers who took the drug, not morning and evening moderately, but continually. Among these people I have never seen violence or brawling; but I have seen two cases where there was a fantastic excitement which was not very far removed from temporary insanity. I should say the men did not seem *compos mentis*. I have been told that they belonged to the town and smoked ganja. I have not seen either of them smoke. One of them told me himself he was a smoker; and I believe in the information I have about the other. There is a third man who seems to be a religious mendicant and lies on a tiger skin. I have seen him smoke. He often shouts. I have never seen him violent.

But some say he is violent. He has the sympathy of the passers-by. One of the two cases already referred to came under my observation in Jail, but he recovered or cooled down before I had to certify on the case. At first he was excited and his actions were peculiar. His speech was not. He answered rationally. But he cooled down, and I certified that he was sane. His actions were merely throwing up his eyes, contorting his body, and conducting himself like a fool. He could not keep still. But there was no violence. I believe he was a ganja smoker, because he was known to be so and because he said so. He was charged with theft. Apart from this case of temporary excitement, I have never had a case of ganja insanity.

I am unable to say anything about the habits of the people generally in regard to the use of the drug, although I have toured about in the district. The ganja question has never obtruded itself on me. It has only come to my notice in connection with a vaccinator giving information about illicit possession of ganja in Khorda. The sub-divisional officer told me he was an informer; and I made inquiry, and had to order him to desist from this owing to the unpopularity which such action would bring. It would damage the work. It was told to me because the sub-divisional officer thought it was very inexpedient, and I concurred.

116. Evidence of Assistant Surgeon RAI TARAPROSANNA RAI BAHADUR, Baidya, Chemical Examiner to the Government of Bengal, Calcutta.

1. None, except the little from occasional examination of the drug in the Chemical Examiner's Department.

2. Dr. Prain's definitions are correct, at least as far as Lower Bengal is concerned. In Lower Bengal the leaves are called siddhi, the resin charas, and the dried flowering tops ganja.

18. Both ganja and siddhi are known to deteriorate in quality by keeping.

19. Ganja and charas are used only for smoking.

20. A small proportion of the lower classes smoke ganja and charas. Respectable people who

have contracted the habit smoke them in private, but their number is very small.

21. Round varieties are preferred; chur is considered inferior in quality.

23. Bhang is never used for smoking.

24. Bhang-eating in the shape of majum is chiefly confined to the inhabitants of the North-Western Provinces. Bhang-drinking is common in the North-West, and is prevalent to some extent also in Lower Bengal.

27. The consumption of these drugs is chiefly confined to the lower classes of people.

28. (a) About one pice worth of ganja, weigh-

ing about one anna (11 to 12 grains), forms the average daily allowance of moderate habitual consumers.

29. Ganja when used for smoking is mixed with bits of tobacco leaf, moistened with water, and kneaded in the palm of the left hand with the right thumb; then cut up and put in an earthen pipe (chillum), placed on a huka, and smoked. Occasionally dhatura seeds are mixed with ganja, chiefly for purposes of theft, by unscrupulous men to render their victims helpless.

Before smoking, charas is first enclosed in the middle of a little prepared tobacco (thick paste of powdered tobacco leaf and molasses), and gently heated over a fire (the fire of a chillum ready for smoking answers best). The charas is then taken out and mixed with the tobacco and smoked in a huka.

The ingredients mixed with siddhi before pounding it into a paste are usually black pepper, poppy seeds, cardamom seeds, aniseeds, cucumber seeds, dry rose petals, and similar other spices. Occasionally dhatura seeds are used. The motive for such practice is almost invariably to facilitate the commission of crime or mischief. Sometimes the active principle of siddhi is extracted by being parched in hot ghee, which is subsequently strained and made up into cakes with sugar and dried milk. This preparation is called majum. It is used as a narcotic only.

When siddhi is used for drinking, the leaves are washed and ground into a paste with spices, and made into a sherbet with sugar and water. I do not know if opium, nux-vomica, cantharides, or betel-nut is ever used with these drugs.

30. Smoking of ganja and charas is usually carried on in company. Siddhi may or may not be so taken. The use of the drugs is chiefly confined to the male sex. Children rarely use them unless when they are very depraved.

31. Prolonged use develops into a habit. Once contracted, the subject does not readily give it up; but, unlike opium, discontinuance of the use of the drug is not followed by any serious inconvenience. There is no particular tendency of the habit to develop into excess.

32. None with regard to ganja and charas. On the fourth day of the Durga Puja, after the idol has been thrown into the river, all the male members of a family take a little of bhang sherbet. The majority, however, take only an innocuous quantity, but some take advantage of this opportunity to take it to excess. The use of the drug on this occasion is considered essential. Even those who have an antipathy for narcotics, must put a drop of bhang sherbet on their tongues. The use of the drug on such rare occasions is not likely to lead to the formation of a habit, and is by no means injurious. The custom of taking siddhi on special occasions is probably because siddhi also means success. On all auspicious occasions the presence of the drug is considered essential. In making bazar purchases for such occasions, siddhi always heads the list of things to be purchased.

33. The habitual use of all is regarded as disreputable, with the exception of siddhi when used as medicine. Public opinion is against the habitual use of all of the three drugs, because they are narcotics and may produce evil after-effects. As far as I know, the hemp plant is never worshipped in Lower Bengal.

34. If a man is compelled to suddenly give up using ganja after prolonged use, he would cer-

tainly feel it. The effect would be inappreciable in the case of charas and siddhi.

35. The total prohibition of the use of the drug would produce discontent, and may give rise to illicit manufacture of the drug. If habitual consumers are prohibited from using the drugs, they would most probably take to using alcohol or opium.

36. The drugs are cheaper than alcoholic beverages, and are never replaced by alcohol. On the contrary, those drugs are sometimes used when people cannot afford to pay for alcoholic drinks.

37. Charas is milder in its effects than ganja.

38. Chur is said to be weaker than round and flat ganja.

39. Ganja and charas are used only for smoking; siddhi for eating or drinking. Smoking of ganja is stronger in its effects than smoking of charas or moderate use of siddhi. Siddhi in sufficiently large dose produces intense narcotism. Charas and bhang are not known to produce tendency to insanity. Smoking of ganja is not an unfrequent cause of insanity.

40. Siddhi is used by kabirajes in native medical practice. It is also used in the treatment of cattle disease. Ganja is also said to be used for the latter purpose.

41. (a) Siddhi is used medicinally for digestive disorders. It notably increases the appetite. Ganja also does the same.

(b) Like other narcotics, moderate use of ganja is said to give a staying-power under severe exertion and to alleviate fatigue.

(c) Ganja is said to give immunity from attacks of miasmatic diseases.

For medicinal purposes siddhi is used by both the rich and the poor; ganja and charas by labouring classes only. I refer to the moderate habitual use of the drug.

42. The moderate occasional use of the drugs is harmless. The moderate habitual use of the drugs is not known to produce evil effects.

43. The moderate consumers are inoffensive.

44. The effect of the moderate use of the drugs upon habitual consumers is refreshing. Ganja and charas in such cases may produce mild intoxication attended with pleasurable sensation. Siddhi and ganja increase the appetite for food. The effect of the drugs may last for about an hour. Usually there are no after-effects. No longing or uneasiness is felt for want of subsequent gratification, *i.e.*, immediately after the effects of the drugs have passed off; but a habitual consumer feels happier and more at ease if he gets the drug at his accustomed hour.

45. (a) The habitual moderate use of any of the three drugs is not known to produce any physical, mental or moral evil effects. It may only make a man slightly irritable.

(b) to (f) No.

46. The habitual excessive use may produce physical, mental and moral evil effects. Habitual excessive use of ganja is known sometimes to produce dysentery and bronchitis. It may also weaken the intellect and produce insanity. The mental disorder is usually of a violent character, and may sometimes develop into confirmed (permanent) mania. In cases of temporary insanity the symptoms may be reinduced by indulgence in the drug after liberation from restraint.

47 and 48. No.

49. The first effect of the drugs, like that of most other narcotics, is to produce general ex-

citement. They may, therefore, be sometimes employed to excite the passions. But habitual moderate ganja-smokers generally shun women. Prostitutes are not known to use the drugs as aphrodisiacs. The drug has no special power to produce impotence. When impotence follows the use of the drugs as aphrodisiacs, it would be difficult to determine how much of it is due to the influence of the drugs, and how much to excessive indulgence of the appetite under artificial stimuli.

50. Excessive use of the drugs may produce similar effects in an exaggerated degree.

51. Habitual moderate consumers of the drugs are not known to be specially addicted to crime, but bad characters may use these drugs equally with other narcotics.

52. The excessive use of the drugs is common among badmashes.

53. People indulging in excessive use of ganja

may become violent and commit crimes. They are sometimes affected with homicidal frenzy and run amuck.

54. Yes. They sometimes do it.

55. Ganja and charas cannot be easily administered to others without their knowledge. Criminals sometimes induce their intended victims to take siddhi so as to make them insensible to facilitate commission of crime. In large doses siddhi alone may produce profound sleep.

56. Moderate consumers of the drugs usually take them in an unmixed state, or mixed with comparatively harmless substances only, such as tobacco with ganja and charas, and spices with siddhi. Veteran ganja-smokers are occasionally known to take dhatura seeds with ganja to heighten its effects; but more commonly dhatura seeds are mixed with ganja to be administered to others for criminal purposes.

57. I do not know that ganja or charas is ever eaten or drunk.

117. Evidence of RAI BAHADUR KANNY LOLL DEY, C.I.E., late Chemical Examiner to the Government of Bengal, Calcutta.

2. Dr. Prain's definition of the drugs may be taken as correct. The drugs are known in and about Calcutta as ganja, charas and siddhi or bhang.

16. Yes. Bhang is usually prepared by the people in their own houses. When the plant is unusually leafy, the leaves do not adhere to the flowers on the stems so as to become clotted, but remain detached. These leaves are gathered and dried and sold as siddhi, subji or bhang.

18. All these drugs do not keep well after six months, unless they are preserved in a stoppered bottle and exposed to the sun from time to time.

19. There is but one form in which ganja and charas can be used, which is by burning like tobacco in a chillum and inhaling the smoke through a pipe.

20. Ganja is a favourite with the up-country people, quite as much as tobacco is with Bengali. I do not intend to say that its use is confined to the higher provinces alone; it is also in demand in Lower Bengal, but here it is not so universally adopted as a stimulating drug. Labourers, night-watchmen, ascetics and other people following occupations involving hard manual labour or exposure to the influences of the weather are given to ganja-smoking because it enables its votaries to undergo exposure or great manual labour at a minimum cost of tissue. Charas is expensive, so it is seldom used by low class men.

22. The ordinary charas sold in the bazars is the charas of Kabul, as gathered in Central India. The most valuable drug is that grown in Nepal and sold at double the price of the ordinary charas. The charas of Herat is said to be the most powerful variety of the drug, but it is scarcely known in this country.

23. I am not aware of bhang being used for smoking.

24. Bhang is a favourite with the up-country people. In Lower Bengal darwans, ascetics and up-country rich men use it.

25. The use of charas is diminishing. But it is very difficult to say whether the use of ganja and bhang is decreasing. Ganja and bhang are sometimes used as substitutes for spirituous liquors as being cheap and less injurious.

30. It is a remarkable fact that in this country at least the votaries of ganja, as a rule, always smoke the drug in company and seldom singly. People sit in a ring and pass the huka round,

nobody taking more than one or two long-sustained puffs. Women and children seldom smoke ganja and charas in Lower Bengal. Women suffering from bowel complaints have recourse to bhang, other remedies failing.

31. Ganja-smoking and charas-smoking are at first very repulsive; but when the habit is once formed, it is difficult to break it off; not so difficult, however, as to break off the habit of drinking spirituous liquors or opium. The habit of drinking or eating bhang can be easily formed and given up. A moderate habit of smoking ganja or charas and drinking bhang seldom grows into excess.

32. Ganja votaries before beginning to smoke always take the name of Mahadev, with whom it is a favourite drug. The use of bhang affects our social custom on the Bijaya day after the goddess Durga has been thrown into the water. The custom is quite harmless and never leads to the formation of a habit. It is generally believed to be essential on that day. Siddhi forms an essential element in all religious and social performances.

33. I believe the indulgence in charas seldom or never grows into a passion.

34. Daily labourers, ascetics, persons who expose themselves to the inclemency of the weather, who keep up at night, who are suffering from bowel complaints or want of appetite, would be deprived of a necessity of life and valuable remedy if they are prevented from ganja-smoking.

35. A compulsory prohibition of the use of these drugs would cause great misery and create discontent, as they are absolute necessity with the people who use them. Yes, if the consumers are deprived of the short spells of enjoyment amid the labour and cares of life. Prohibition may stimulate men to have recourse to alcohol and other drugs, who now shun them on religious and social grounds.

36. Hemp is generally substituted for alcohol as being cheaper and less disastrous to society.

37. A ganja-smoker may often be made out by his appearance, which is always dry and rickety, eyes sunken and cheeks flattened. Ganja fumes are believed to possess the property of drying up the humours of the body and giving the persons who inhale them a faded look. A ganja-smoker can never be slim, and if the habit of excessive indulgence be long persevered in, it brings on dysentery and diarrhoea. The evils are in a great measure counteracted by a wholesome

diet of milk and ghee, and confectionery having a large share of these oily ingredients. None of these effects are perceived in a charas-smoker. I do not know whether the resin (charas) has any property of mitigating the evils produced by ganja, but I believe the indulgence in this drug seldom or never grows into a passion.

The intoxication produced by charas-smoking is much tamer than that of ganja. It scarcely brings on any hallucination such as is caused by intoxication generally. Persons under its influence scarcely betray any incoherence in manner or speech. Neither is the habit productive of any perceptible evil in the constitution. But ganja is more powerful in its effects, and it leaves a more lasting impression on the system. One peculiarity in ganja-smoking is that it makes the persons with whom the indulgence has become a habit choleric and irascible, rough in manner and rough in speech.

40. Bhang and ganja are prescribed by native doctors in bowel complaints and are recommended as appetisers. Bhang is also used in the treatment of cattle disease.

41. Bhang and ganja are nervous stimulants and give great staying-power under severe exertion, exposure and fatigue. They are great appetisers. Hemp is acknowledged in British Pharmacopoeia as a good febrifuge, and is reputed to be prophylactic of malaria in the steamy swamps of Lower Bengal.

42. The moderate use of these drugs is certainly harmless because they are nervine.

43. Generally speaking, moderate consumers are inoffensive to their neighbours.

44. The immediate effect of the moderate use of these drugs is that it produces exhilaration and mental cheerfulness. It does not produce intoxication to habitual consumers. It does not allay hunger, but creates appetite. The effect does not last more than a couple of hours. There are no after-effects.

45. Excess causes a peculiar kind of delirium and catalepsy, though it is a well-known fact that habits of intoxication, when persevered in, have a great tendency to affect the nerves. Ganja-smoking has a more powerful tendency in bringing on the attacks of insanity.

47. There is no hereditary longing for these drugs.

Oral evidence.

Question 1.—I am an Honorary Member of the Pharmaceutical Society of Great Britain and Fellow of the Chemical Society of London. I served the Government for thirty years, and it is now ten years since I retired. I entered service as an Assistant Surgeon. My first appointment in the year 1854 was as Assistant to the Chemical Examiner. From 1854 to 1884 I was always connected with the Chemical Department. From 1873 to 1884 I was Lecturer of Chemistry and Medical Jurisprudence at the Campbell School. I officiated for six months as Chemical Examiner to Government and Professor of Chemistry at the Medical College. Since my retirement I have pursued my chemical studies and engaged in private practice. While I was in Government employ I had a pretty fair private practice in my leisure hours.

I have conducted certain physiological experiments with the hemp drugs. Samples of the drugs were sent to me, and I made extracts from them and administered them to people. I cannot

remember who sent the specimens, what the precise object of the enquiry was, nor when the enquiry was held. I think I reported upon it, but cannot be certain. I believe Dr. Macnamara was Chemical Examiner at the time, but the enquiry was placed in my hands, and, as Additional Chemical Examiner, I corresponded direct with Government about it. The enquiry was probably made before 1872, *i.e.*, before I was transferred to the Campbell School. The report was of the nature of that contained in the Table XII at page 50 of Dr. Prain's report, but I do not recognize the table. The experiments mentioned in paragraph 23, page 9, of Hem Chandra Kerr's report are probably those conducted by me. These are chemical experiments, but I have also conducted physiological experiments. The latter experiments consisted in my administering on a single occasion an equal quantity of the extract from two samples of ganja to two persons with the object of comparing their physiological effects. One was found to be stronger than the other, but I cannot say which. I did not see either man while he was under the influence of the drug, and cannot say whether either was in a cataleptic condition. It would be impossible to say whether the man was in a cataleptic condition or not, without observing him.

In my practice I have been very seldom called in to attend a case of illness from the hemp drugs used as intoxicant. I can only remember being once called in for an overdose of bhang. I have not, therefore, much experience of the matter in my practice, but I have much experience socially. My written answers regarding the effects of the drugs are therefore based on my social experience.

Question 18.—My experience of the drug in my private practice is that it is an excellent nervine stimulant. I have used both the extract and the tincture, but generally the tincture. I cannot say that the drug can always be relied on to produce the desired physiological effect, but it has proved of marked use in treatment of cases connected with the genito-urinary organs and malarial fever. The extract has not always a similar strength. The drug does deteriorate rapidly, and when it is kept in the crude state it will not last more than six or eight months. The extract keeps better than the crude ganja, but it is not reliable after a certain time. For one year it will keep well, for two years it might, even in stoppered bottles. I can form no opinion as to the cause of the change which occurs when the drug loses its physiological effect.

Question 25.—People addicted to wine suffer a great deal; those addicted to the hemp drugs do not suffer so much. My statement is based on my experience of the excessive habit with regard to both. Socially alcohol is more disastrous than the hemp drugs; that is my experience.

Question 34.—I consider the drugs a necessity of life to the poor people who take them, because they get relief from them under their physical exertions and mental troubles. Some stimulant is necessary for such people, and I consider this is the best and cheapest of all the nervine stimulants I know. I never prescribed ganja-smoking, but when I have found patients suffering from nervousness and want of sleep who have abandoned the habit, I have advised them to resume it. I refer to the moderate habit and patients of the gentlemanly class. What I have said about the drug being a necessity of life applies to the moderate use among the labouring classes. Ascetics stand apart. They suffer from excess.

Question 37.—In this answer I am speaking of the immoderate use, *i.e.*, of the man who takes the drug not as a necessity of life but, whether he needs it or not, as a votary of the drug.

My remarks about charas are based on my experience in Bengal where very little is consumed. Regarding this drug my experience is confined to the respectable classes. When they use it the drug is mixed with prepared tobacco in proportion of one-third, while ganja is mixed with raw tobacco in the proportion of one-half. The alcoholic extract of ganja is 3 or 4 per cent. The alcoholic extract contains the active principle. Charas is the inspissated juice obtained from the inflorescence of the plant and the agglomerated leaves adjacent to the inflorescence. The alcoholic extract of charas might be 15 or 20 per cent. I speak roughly. This extract also contains the active principle. Notwithstanding the greater strength of the alcoholic extract of charas, I think that the essential oil contained in the leaves and inflorescence of ganja has a more stimulating or baneful effect when burnt than charas has, which contains no essential oil. In burning the essential oil is volatilized at a certain degree of heat, and if greater heat is applied it disappears. In the case of smoking, the oil volatilized goes into the lungs as well as into the stomach. The difference between ganja and charas consists, therefore, in the presence of essential oil and other organic matter in the former which are wanting in the latter. By other organic matter I mean the burning of the leaves and inflorescence of the ganja.

Question 45.—In the last sentence of this

answer, I am comparing ganja-smoking with opium and alcohol; and the statement is based on the returns of lunatic asylums and the cases of gentlemen who have been inveterate ganja-smokers and whose minds more frequently become deranged than those of inveterate consumers of alcohol or opium. The cases, however, are very few. The derangement to which I refer does not amount to insanity, but they have hallucinations. Cessation of the ganja habit and good nourishment remove these hallucinations. I have seen cases in which the habit has been reduced, but not cases in which it has been altogether abandoned, and by cessation of the habit therefore I mean cessation of excess. This peculiarity of ganja I attribute to the peculiar action of the drug on the nerves. Though the excess of ganja is more likely to produce insanity than the excess of alcohol, still I regard alcohol as more disastrous to society, as excess in it induces various diseases which have a tendency to shorten life; whereas ganja, so far as I know, does not shorten life. In my experience the people of this country have undoubtedly a difficulty in sticking to the moderate use of alcohol. The strictly moderate use of alcohol has its benefits. In comparing the general effect of the drugs on the population, it should be remembered that the consumers of alcohol are most numerous, of opium fewer, and of ganja fewest. The ganja-consumer requires oleaginous food, the opium consumer milk, and the alcohol drinker meat. I should think that the amount of harm which results from opium is rather less on the whole than that which results from ganja, but there is little to choose between them.

118. *Evidence of ASSISTANT SURGEON UPENDRA NATH SEN, Officiating Civil Medical Officer, Malda.*

1. As a medical man and Superintendent of Jail I had opportunities of obtaining information regarding matters connected with hemp drugs.

2. Yes. Siddhi or bhang; charas is not used in this district; ganja, flat, round and chur.

3. The hemp plant grows spontaneously in Monghyr. It is abundant in Malda.

6. Ordinarily dense.

7. Not in the Malda District.

16. No; bhang can be prepared from the hemp plant wherever grown.

29. To intensify its intoxicating powers, dhatura seeds are occasionally mixed with bhang, and even with ganja.

31. The habit of consuming siddhi, charas, and ganja is easily formed, and it is not difficult to break off.

32. In Lower Bengal, on the evening of the fourth day of the Durga Puja, it is customary for the Hindus to drink a cup of siddhi made up with sugar and water. It is always temperate, and never leads to the formation of the habit, and in no way injurious.

37. The effects of charas-smoking are mild in comparison to those of ganja.

38. Chur is the strongest of the three.

40. Siddhi or bhang is prescribed by native physicians in atonic dyspepsia, diarrhoea, and as a nervine tonic, and also as anodyne and hypnotic where opium is contra-indicated. Externally as a

poultice in local inflammations and external hæmorrhoids, and ganja boiled in mustard oil is used in certain form of skin diseases, such as scabies, pruritus, etc.

41. Ganja is used to give staying-power under exposure and alleviate fatigue by boatmen, cart-drivers, and religious mendicants.

43. Yes.

44. The immediate effect of a cup of bhang or a chillum of ganja is refreshing and appetising on the habitual consumer. The effect lasts for half an hour or so, and has no after-effects. The want of subsequent gratification produces longing, uneasiness or laziness.

45. Ganja, siddhi, and charas.

(a), (b) and (c) No.

(d) Bronchitis and asthma are common complaints of ganja-smokers.

(e) No.

46. I believe habitual moderate or excessive use of ganja, like other forms of self-indulgence, grows into excess, and continued excess impairs the nervous system, throws the mind out of balance, and causes temporary insanity and undermines the constitution.

47. No.

49. Yes; it is prescribed as an aphrodisiac by hakims and kabirajes. No; it is not more injurious than its use as an ordinary narcotic.

53. I do not know of any case in which excessive indulgence in any of these drugs has led to temporary homicidal frenzy.

54. Yes.

55. Yes; sometimes done. Invariably mixed with dhatura seeds for the purpose.

69. People are not consulted before a shop is opened in any locality.

119. Evidence of ASSISTANT SURGEON BOSONTO KUMAR SEN, in Civil Medical Charge, Bogra.

1. As a medical man and service in ganja-producing districts.

2. Yes, these definitions can be accepted in this province. These products are locally known as (1) bhang or siddhi, (2) charas, (3) ganja.

3. I know hemp plant grows spontaneously in Rajshahi and Bogra Districts.

4. It is known by the name of bhang and siddhi plants. They refer to the same plant.

5. It grows in low land in winter.

6. Dense.

7. Hemp plant is cultivated extensively in the Rajshahi Division (a) for the production of ganja.

11. No.

12. No.

13. Cultivation of hemp plant for ganja is restricted to Rajshahi Division. Do not know the cause of such restriction.

14. (a) Ganja is prepared in the ganja-producing tracts in the Rajshahi Division to a large scale.

15. (a) *Products of cultivated plants.*

Ganja.—It is used only for smoking, and is prepared for use, first, by separating the seeds, if there are any, then washing it with a few drops of water, water squeezed out, then wrapped with dry tobacco leaves, the whole thing pressed between the thumb of the right hand and palm of left hand, then placed on a piece of wood called *godee* or *pira*, and cut into very small pieces with a knife, taken out from the *godee*, and again pressed as before; and this is repeated several times before it is ready for smoking in the *chillum*.

(b) *Products of uncultivated or wild plants.*

Bhang.—The dried leaves are thoroughly ground in a stone or mortar with some water, then mixed with more water or milk and sugar and drunk as sherbet.

16. Bhang is prepared for drinking purpose by the people in their houses. Yes, bhang can be prepared from the dried leaves of any wild hemp plant.

18. Yes, ganja and bhang deteriorate by keeping long.

19. I know ganja and charas used only for smoking.

20. Ganja is used for smoking, chiefly by the lower class of people, although the higher classes of people are not altogether free from it; the bairagis and sanyasis are more addicted to it. I cannot say the exact proportion. There are no particular localities of which I am aware. I do not know much about charas.

21. I know only flat variety of ganja used for smoking.

28. Average cost of ganja per diem to (a) habitual moderate consumers from one to two pice; (b) habi-

tual excessive consumers from one to two annas and upwards.

29. Dhatura is exceptionally mixed with ganja for smoking; and also with bhang or siddhi for drinking to increase the narcotic power of the drugs.

30. Ganja and bhang are generally preferred to be taken in company. Males are more addicted. Females, chiefly prostitutes, and *Haries* also use it. It is used principally in youth and old age. Children are not free from ganja-smoking, the boys of the singing party generally smoke ganja.

31. The habit of ganja-smoking is easily formed in bad company. Yes, it is difficult to break off the habit. Yes, there is a tendency for moderate habit to develop into the excessive.

32. I know bhang is used by male members of Hindu families on the third day of Durga Puja (Nabami-day at night); also on the fourth day of Puja. Such custom is not essential. It is temperate. It is not injurious, and does not lead to the formation of habit. The practice is, however, wearing out day by day. The sanyasis use ganja for the purpose of concentrating their thoughts to religious purposes.

33. The consumption of ganja and bhang is regarded with hatred by the public. Ganja-smokers are generally rude, violent, and angry in disposition, imperious, wanting in duty to parents, wife and children, and are bad citizens and quarrelsome neighbours; they are liars and exaggerate tales. I do not know any custom of worshipping ganja.

34. It may be a little hard for a habitual ganja-smoker to relinquish that habit at the beginning; but yet, like other habits, it may also be discontinued gradually without any bad effects. We get ganja-smokers in prisons and hospitals; but the privation of the drug does not seem to tell on their health.

35. I do not know why it would not be feasible to prohibit the use of ganja. It may be attempted by imposing heavier duty on it. The classes of people smoking ganja are not fit for any agitation amounting to a political danger. Yes, the prohibition of ganja-smoking would be naturally followed by recourse to (a) alcoholic stimulants (b) or other narcotics.

36. I think not that alcohol is substituted for ganja or bhang.

40. Both ganja and bhang are used by kabi-raj for medicinal purpose in bowel complaints. Yes, bhang is used in cattle diseases.

41. (a) Ganja and bhang are not parts of food, but undoubtedly they increase the appetite.

(b) Ganja and bhang do so.

(c) I have no experience of their action as febrifuge or preventive of malaria.

(d) They produce sound sleep and relieve pain and anxiety.

Labouring classes of people and others (very small number) use bhang and ganja occasionally for the purposes indicated in (a), (b) and (d).

42. Moderate use of bhang and ganja do not seem to produce any serious organic mischief.

43. No, even moderate consumers are repulsive.

44. They (bhang and ganja) produce pleasant intoxication, talkativeness and merriment. They are refreshing. They produce voracious appetite not appeased by food. They do not allay hunger. Their effect lasts for four or five hours, sometimes longer. The after-effects are headache and giddiness. Yes, the want of subsequent gratification produces uneasiness.

45. Yes, the use of ganja and bhang produces noxious effects. They weaken the constitution and produce loss of appetite. They generally produce dysentery, asthma, and bronchitis. They impair the moral sense, induce laziness or habits of immorality or debauchery. A ganja-smoker never talks on any important moral, social or religious subject, nor does he mix with good people. He has got a circle of his own where he indulges in loathsome conversation. Ganja produces insanity (mania) both temporary and permanent. In temporary variety the symptoms were seen to recur on use of the drug after liberation from restraint. The typical symptoms of insanity are excessive talking, constant motion, insomnia, incoherent trembling and violent screaming. The insanes generally confess to their taking the drug.

46. Ganja produces the symptoms mentioned under the heading habitual moderate use of the drug in a greater degree.

47. The use of ganja and bhang does not appear to be a hereditary habit, or to affect the children.

48. Answer to question 47 also applies here.

49. Yes, ganja and bhang are used as aphrodisiac. I cannot say if they are so used by prostitutes. Excessive indulgence of the sexual organs produces eventually impotency; but whether hemp has any direct connection with impotency I cannot say. I think ganja is more injurious when it is used as narcotic than as an aphrodisiac, because in the former case the people generally become insane.

50. Answer to question 49 also applies here.

51. Ganja-smokers generally commit petty thefts when they are in need of pice for the purchase of ganja.

52. The same.

55. Yes, stupefaction by ganja may be induced without admixture.

56. The admixture of dhatura seed with ganja and bhang increases the narcotic action of these drugs.

Oral evidence.

I am L. M. S. of Calcutta. I took my degree in 1877, and have been in Government employ since. I have served in several districts in Bengal and Assam. I have no special experience of insanity, except that I was employed for three months about a year ago in the Dullunda Asylum.

Question 45.—My first three sentences here

deal with the effect of ganja on health generally. My remarks are founded on personal experience. I have seen more than one person, about half a dozen in my village Madhopara in the Dacca District, suffering from dysentery, bronchitis and asthma who were also ganja-smokers. They were all excessive smokers. These effects do not follow the moderate, but the excessive use. It is a mistake to have put them under the moderate use. It is not always easy, however, to distinguish between the moderate and excessive, because moderation may go to excess. When I see a man I may think he takes it moderately. But when he is diseased I may come to know that he used it in excess stealthily. All these people were habitual smokers, not occasional. From that I cannot exactly say that they used ganja in excess. The fact that they were ganja-smokers led me to believe that these effects were due to ganja. I have seen many non-smokers suffering from these diseases. There are many causes that bring on dysentery, bronchitis, and asthma. But I did not discover any other causes in these cases. I have no recollection of ever treating any cases of dysentery, bronchitis, or asthma caused by ganja. These cases are the basis of my remarks. I saw them in my own village with my own eyes. I do not remember any case of dysentery, bronchitis or asthma in a ganja-smoker which I attributed to any other cause. In other words, where I saw ganja-smokers suffering from these diseases I attributed them to ganja. This was 20 years ago, before I was a medical student.

As to ganja producing insanity, both temporary and permanent, I only knew one case apart from my experience in the Dullunda Asylum. That was in my village. This man was a very excessive smoker. He was sent to the Dacca Asylum, and died there after two or three years. This was when I was a school-boy. I have no experience of temporary insanity, except in cases in Dullunda with ganja history. I base my remarks regarding insanity and the symptoms on text-books verified by my three months' experience in the asylum and my recollections of this case.

"The typical symptoms of insanity" does not mean in my answer hemp drug insanity, but symptoms of insanity generally. There is no text-book that I know that tells the symptoms of hemp drug insanity. By insanes confessing to taking the drug, I mean insane people who have also a ganja history.

Question 49.—The experience that I have does not justify my statement as to people generally becoming insane. It is not based on experience, but from inference. I saw one hard ganja-smoker who became insane. Therefore I conclude that this is more injurious to health. I cannot call ganja more injurious when used as an aphrodisiac, because when the man uses it as a narcotic he is useless; but when a man has an aphrodisiac he is good for something. The use of the word "generally" may not be correct. It is too strong. Few, at least, become insane. Since I entered Government service I have never had a case of dysentery, bronchitis, asthma or insanity due to ganja under my treatment, except in the Dullunda Asylum.

120. Evidence of ASSISTANT SURGEON NORENDRA NATH GUPTA, *Baidya*, in Civil Medical charge, Rangpur.

1. From conversation with the ganja-smokers (popularly called ganja-khors) during my mufassal movements in my official capacities as Deputy Superintendent of Vaccination, Darjeeling Circle;

Superintendent of Vaccination, Eastern Bengal Circle; Deputy Sanitary Commissioner, Western Bengal and Presidency and Eastern Bengal Circles; as officiating Civil Medical Officer, Pabna, and Assistant Surgeon in Civil Medical charges Rangpur, and also during my halts at head-quarters of districts.

These products are known in Rangpur by the names of ganja, charas, bhang and siddhi.

3. Rajshahi, Bogra, Dinajpur, Rangpur, Pabna, Dacca and Mymensingh. It is abundant in Rangpur.

4. Ganja and bhang. Ganja and bhang are of different species.

6. Generally dense.

7. No cultivation for any purpose.

10. I have no knowledge.

11 and 12. Not known.

13. There is restriction for the cultivation of hemp plant for ganja in this district.

The other parts of the question not answered.

14. (a), (b) and (c) No.

15. No knowledge.

16. People prepare bhang in their houses. It can be prepared from the hemp plant grown anywhere. Ganja or charas cannot be prepared from the wild plant grown anywhere.

17. Not known.

18. Ganja, charas and bhang deteriorate by keeping. They perfectly lose their effects in time. They keep good for about two years. Reasons of deterioration being the destruction of resinous substances. The deterioration of the drugs can be prevented to a certain extent by keeping them hermetically sealed in tin-lined boxes.

19. Ganja is used for smoking in this district. Charas is not used here.

20. Generally low classes of people smoke ganja here, such as palki-bearers, coolies, dhobies, Bedias, fishermen, up-country cooks and servants, etc.

21. Flat and chur ganja are used for smoking indiscriminately in this district.

22. Charas not used here and hence no import.

23. No.

24. Bhang is occasionally used as drink by the people here, specially by the up-country men, and it is rarely eaten by some prepared with luchi and kachuris.

25. The use of ganja is on the decrease owing to its increased price.

26. Most of the ganja-smokers fall under the head (a), i.e., habitual moderate consumers. A few fall under head (c), i.e., occasional moderate consumers.

27. Ganja is generally used by the low classes of people who are subject to excessive labour and exposure.

28. From 2 to 4 pice worth ganja being taken by each individual here among the habitual moderate consumers every day, morning and evening.

29. Dried tobacco leaves are mixed generally with ganja by the ganja-smokers here. Dhatura is not used. Tobacco leaves are mixed with ganja in order to remove its pungency. While bhang is drunk, it is generally mixed with milk

and sugar. Dhatura seed is occasionally mixed with bhang for drink.

30. People generally consume ganja in solitude. Its use is chiefly confined to male sex and generally from adult age. It is not used by the children here.

31. The habit of consuming ganja is easily formed. It is not difficult to break off the habit. The moderate ganja-consumers may turn to be excessive ones.

32. No custom either social or religious in regard to the consumption of any of the drugs in question here.

33. People generally regard the ganja-smokers with some degree of hatred. There is no concern with the religion here. The ganja-smokers are generally of peevish and hot temperament, so they are disliked by the people. No custom to worship hemp plant here.

34. It would certainly be a serious privation to habitual moderate ganja-consumers to forego the use of the drug. They lose their energy and appetite and get flatulence.

35. It would not be feasible to prohibit the use of the drug at once. If it be prohibited, then the ganja-smokers will resort to illicit dealings. Prohibition is therefore not desirable, as it will render serious discontent among the consumers. No political danger is apprehended if the use of the drug is discontinued. The prohibition of the ganja-smoking is very likely to be followed by recourse to alcoholic stimulants or other narcotic drugs.

36. I don't think.

37. I have no knowledge of charas-smoking.

38. No difference in effects.

39. Smoking of the preparation of the hemp plant is more injurious than drinking the same, because the smokers generally possess diseases of the lungs and air passages, such as bronchitis, hæmoptysis, asthma and chronic catarrh.

40. Yes; bhang and ganja are prescribed by the kabirajes for medicinal purposes. Yes; bhang is used for the disease of the cattle.

41. The moderate use of bhang and ganja is beneficial to health to a certain extent :

(a) as a digestive ;

(b) to alleviate fatigue under severe exertion and exposure ;

(c) as a preventive of disease in malarious and unhealthy districts ;

(d) as aphrodisiac.

This drug is generally used by the low classes of people such as palki-bearers, Domes, dhobies, Bedias, Chamars, fishermen, etc., in order to escape from the influences of malarial diseases and from the effect of fatigue. I refer the above to habitual moderate consumers of ganja and occasional moderate consumers of bhang. Higher classes of people occasionally use ganja and bhang for their aphrodisiac properties.

42. The moderate use of the drugs, ganja and bhang, is beneficial to health.

43. Yes.

44. The immediate effect of the use of ganja is to exhilarate the nervous system. It is refreshing to some extent. It produces intoxication. It does not allay hunger. On the contrary it increases the appetite. The effect lasts from two to twelve hours, according to the dose and the nature of its

preparation, and according to the constitution of the persons using the drug; the after-effects of the drug being general depression. The above answers under 44 are applicable to the habitual moderate consumers of bhang. Yes; uneasiness or longing for the drugs, ganja and bhang, is felt if not subsequently used in time.

45. (a) The moderate use of ganja and bhang does not produce any noxious effects, physically, mentally or morally.

(b) to (f) No.

46. All the faculties, physical, mental and moral, are impaired by the excessive use of the ganja-smoking. The excessive use of ganja produces dysentery, asthma, bronchitis, chronic catarrh and hemoptysis.

The other parts of the question not answered.

47 and 48. No.

49. Ganja is used as an aphrodisiac occasionally in moderate doses. It is not used as an aphrodisiac by the prostitutes. Not injurious for this aphrodisiac purpose. It does not produce impotence.

50. The excessive use of the ganja produces impotency and other injurious effects.

51. Habitual moderate consumers of ganja are not bad characters. They do not generally commit any crime while under its influence.

52. The excessive use of the drug ganja generally leads to the commission of crime or any other social violence.

53. I have no experience of the occurrence of any particular case.

54. No.

55. It may occur, but I have no personal knowledge of any particular case.

56. The effects of the hemp plant used in moderation or in excess are modified by the admixture of other substances. Dhatura is mixed with bhang to increase its narcotic effects. I have no knowledge of the use of ganja and charas in eating or drinking purposes.

58. So far as I am aware the present system of excise administration is working well.

60. No cultivation here.

61. No production of charas here.

62. No cultivation of hemp plant for the production of bhang here.

65. Bhang and charas are not used, and hence not imported. The present taxation on the ganja sale seems to be excessive.

66. Yes; because chur ganja has the full advantage of having no stalks, whereas flat and round ganja include the weight of stalks which are not used.

67. Yes; the present system of taxation on ganja seems objectionable.

68. Yes; there are shops licensed for the sale of the ganja here, and they should continue to exist for the convenience of the public.

69. Yes; the wishes of the people are consulted before any shop is opened in any particular locality.

70. I have no knowledge under this head.

121. Evidence of Assistant Surgeon CHOONEY LALL DASS, Teacher of Medical Jurisprudence and Therapeutics, Medical School, Dacca.

1. My own knowledge and information obtained by myself from vendors and consumers of these drugs and from others.

2. Yes, these definitions may be accepted as correct.

Siddhi is locally known as siddhi or bhang, charas as charas, and ganja as ganja.

6. Ordinarily scattered, but in some districts dense.

7. Yes, in the subdivision of Naogaon in the district of Rajshahi, as also in the Bogra district.

10. The cultivators of hemp do not form a special class.

14. Ganja is prepared in the district of Rajshahi.

16. Bhang drink is generally prepared by its consumers in their own houses. It can be prepared from the leaves of the hemp plant wherever grown; but ganja and charas cannot be prepared from the wild plant wherever grown.

18. All the three drugs deteriorate by keeping. They lose their effect in time. With ordinary care they will keep good for about a year. Dampness and moisture are the causes of deterioration. Preservation in stoppered bottles and exposure to the sun from time to time may prevent their deterioration.

19. Charas is only, and ganja generally, used for smoking. Ganja, however, is sometimes mixed with sugar and made into a kind of sweetmeat

called majum. It has the effects of ganja, but palatable. It is used in Dacca.

20. Sanyasis, mendicants, bairagis, fishermen, day-labourers, and other people whose occupations necessitate them to exposure to the influences of the weather and to hard manual labour are more addicted to the habit of ganja-smoking than people in other occupations of life. People of better classes sometimes acquire the habit of ganja-smoking, but their number is comparatively small.

21. Flat ganja is preferred for smoking.

22. Charas comes from Calcutta.

23. Bhang is occasionally used for smoking by habitual smokers, who are too poor to procure ganja every day.

24. Bhang is mostly used by up-country people, mendicants, and by some respectable and middle class Hindus and Muhammadans. A great majority of them drink, and about one per cent. eat, bhang.

25. The use of ganja is getting less lately, because the food-grains are getting dearer. It may also be partly attributed to the increased taxation on ganja.

26. The proportion of ganja-smokers are as follows:—

(a) 70 per cent.

(b) 10 „ „

(c) 15 „ „

(d) 5 „ „

28.

	Average allowance.	Cost per diem.
(a) { Ganja .	7½ to 15 grs.	3 to 6 pies.
Charas .	5½ to 11½ „	3 to 6 pies.
Bhang .	6 annas weight	3 pies.
(b) { Ganja .	45 to 60 grs.	1 anna and 6 pies to 2 annas.
Charas .	45 grs.	2 annas.
Bhang .	2½ tolas.	1 anna 6 pies.

29. Ganja is ordinarily (a) mixed with tobacco and exceptionally (b) with charas. Charas is generally taken with tobacco. Bhang is ordinarily mixed either with salt and black pepper or with milk and sugar. The following are the ingredients of the bhang massala sold in the shop, *viz.*, (1) dry rose leaves, (2) cucumber seeds, (3) kakur seeds, (4) kasni, (5) kahu or lettuce seeds, (6) poppy seeds, (7) gokuro kanta (seeds), and (8) aniseed.

30. The consumption of ganja and charas is generally practised in company and that of bhang in solitude. It is not particularly confined to any time of life. Excepting the prostitutes and Bairagis the consumption of charas, ganja and bhang is mainly confined to the male sex. Some women take bhang for chronic bowel complaints. It is unusual for children to consume any of these drugs.

31. The habit of consuming all these drugs is easily formed. It is difficult to break off the habit of smoking ganja and charas, but comparatively easy in the case of bhang. There is no tendency in the case of any of these drugs for the moderate habit to develop into the excessive.

32. In the religious custom a little bhang is taken as a drink on certain festivals, such as Bijoya Dasami day, after the Durga Thakur has been thrown into a river, and bhang water is also thrown on the head of certain lingas. The devotees assert that they drink bhang to forget the miseries of the world, and there is a popular saying that bhang increases intelligence and ensures success, but ganja does the reverse.

33. The consumption of all these drugs, especially ganja and charas is held in disrepute.

34. There would be a serious privation to the consumers of all these drugs to forego their use, because they will suffer for want of them, from pains in the abdomen, diarrhoea, lassitude, and general uneasiness, and they would be deprived of comforts after fatigue, etc.

35. The prohibition of the use of these drugs would cause misery and discontent to the consumers of these drugs.

36. No, because alcohol is more expensive.

37. The effects of charas-smoking are similar to those of ganja, but charas is weaker.

My information is that they have the similar effects.

40. Kabirajes prescribe bhang for its medicinal qualities, and ganja for external application. Bhang is used for the treatment of cattle disease.

41. Moderate use of ganja and bhang may be beneficial in their effects.

(a), (b) and (c) Yes.

(d) Many up-country people take ganja and bhang as a febrifuge.

42. Moderate use of bhang nourishes the body that is, makes it fat, eases pain when present, and it has a cooling effect.

43. Yes.

44. The immediate effect of the moderate use of bhang on the habitual consumer is exhilaration of spirits. It is refreshing. It produces slight intoxication. It does not allay hunger, but it increases the appetite. Its effect lasts for three to four hours. No after-effects. It produces longing or uneasiness. The effects of ganja and charas are almost like those of bhang, but their effects last for 15 to 30 minutes.

45. Evidence on these points is conflicting. The general consensus of opinion is that the habitual moderate use of bhang and ganja does not impair the constitution or injure the digestion or the moral sense or the intellect.

46. Excessive use of ganja may produce noxious effects, such as emaciation, impairment of digestion, dysentery, cough, laziness, and even insanity.

47 and 48. No.

49. Yes, all the three drugs are occasionally used as aphrodisiacs.

50. Excessive use of these drugs sometimes produces impotence.

56. The only substance mixed with ganja is tobacco to improve its flavour and to make it bulky.

57. Ganja is sometimes mixed with sugar and made into a kind of sweetmeat called majum. Its effects are the same as those of ganja, but it is sweet.

122. Evidence of ASSISTANT SURGEON PREONATH BOSE, Teacher of Materia Medica and Practical Pharmacy, Dacca.

1. My own knowledge and information obtained by myself from vendors and consumers of the drugs.

2. Yes. Local names are bhang or siddhi, charas and ganja.

16. Yes, bhang is generally prepared in the house. It can be prepared from the hemp plant wherever grown. Ganja and charas cannot be prepared from the wild plant wherever grown.

18. Yes, all three deteriorate by keeping, and quite lose their effects in time. With ordinary care they will keep good for about one year. Exposure to air and damp causes deterioration. Wrapping up in straw in the case of ganja, cover-

ing with dry leaves and paper in that of charas and packing in a bag in the case of bhang, and then storing them all on wooden shelves in a dry godown, will prevent early deterioration.

19. Charas is used only for smoking. Ganja is used almost exclusively for smoking. In rare cases ganja is eaten mixed with sugar and made into a kind of sweetmeat called here by the name of majum.

20. Consumers are to be found in all classes of the people.

21. Flat ganja.

22. Charas is brought to Dacca from Calcutta

23. No.

24. People from all classes drink bhang.

25. Decrease in the case of ganja on account of its enhanced price, and of the high price of food grains. No increase or decrease in the case of charas and bhang.

26. Ganja.	Charas.	Bhang.
(a) about 75 per cent.	90 per cent	90 per cent.
(b) „ 15 „ „ 10 „ „	„ „	5 „
(c) „ 5 „ „ „ „	„ „	2 „
(d) „ 5 „ „ „ „	„ „	3 „

27. From all classes. Association with consumers in the case of all the three drugs, and use as a remedy for disease in the case of ganja and bhang, mainly lead to the practice.

28. Allowance by weight.	Cost.
(a) Ganja . $\frac{1}{2}$ to 1 anna .	2 $\frac{1}{2}$ to 4 $\frac{1}{2}$ pies.
Charas . $\frac{1}{2}$ anna .	3 pies.
Bhang . 3 annas .	1 $\frac{1}{2}$ pies.
(b) Ganja . 2 $\frac{3}{4}$ to 5 $\frac{1}{4}$ annas	1 to 2 annas.
Charas . „ „ „	„ „ „
Bhang . $\frac{1}{2}$ chittack .	1 $\frac{1}{2}$ annas.

29. Ganja is (a) ordinarily mixed with tobacco, to make it bulkier, and with tobacco leaves, to make it stronger. It is (b) exceptionally mixed with charas to make it stronger. Dhatura is not so used. Bhang massala is sold here for the purpose of being mixed with bhang. Its ingredients are dry rose petals, cucumber seeds, kakur seeds, kashni seeds, kahu (lettuce) seeds, poppy seeds, gokhura seeds, black pepper, aniseed.

30. Ganja and charas mostly in company. Bhang alone as well as in company. Mainly confined to the male sex to middle and old age. It is not usual for children to consume any of these drugs.

31. The habit is easily formed and is difficult to break off. No tendency for the moderate to develop into the excessive habit. The answers refer to every one of the three drugs.

32. Certain sects of people, such as sanyasis, yogis, and recluses, offer ganja to Mahadeo (the destroying member of the Hindu Trinity). In the mela of Tinnath or Trinath (Mahadeo) ganja is always consumed by the votaries assembled. On such occasions the use of ganja is essential. It is both temperate and excessive. No habit can be formed unless such custom is frequently observed. It is essential to drink bhang on the day of the Navami Puja (the third day of the Durga Puja); and on the day of Saraswati Puja (goddess of learning). No habit can be formed from observing these customs.

33. Consumption of ganja and charas is not regarded with favour except in the cases of yogis, sanyasis, and fakirs. There is a public opinion in

regard to the practice. It is disapproval. The consumers are believed to be of irritable temper. Consumption of bhang is not regarded with disfavour. There is no custom of worshipping the hemp plant.

34. Yes. The want of the drug brings about lassitude, disinclination for work, loss of appetite, dyspepsia, rheumatic, and colic pains.

35. (a) No.

(b) Yes.

(c) By law and police vigilance.

(d) Yes.

(e) Yes.

(f) (a) No. (b) Yes.

36. No.

37. Effects similar. Of ganja instantaneous; of charas not quite so rapid; of bhang slow, but lasting longer, and is in some cases characterised in the first stage of intoxication by a sense of irascibility, the bhang consumer bursting out every now and again into loud peals of immoderate laughter.

38. No.

40. Medicinally bhang is used internally; ganja, only in external applications.

41. (a) Yes, all three are so used by consumers from all classes.

(b) Yes, all three so used by labourers and fishermen.

(c) Yes, all three so used mostly by up-country-men who come for work here.

It is the moderate habitual use which is referred to here.

43. Yes.

44. Yes, it is refreshing. Produces intoxication. Allays hunger. Creates appetite. The above answers refer to every one of the three drugs.

Effects of ganja last fifteen to thirty minutes, of charas, two to four hours; and of bhang twelve to eighteen hours. No after-effects in the case of any of the three drugs. Want of subsequent gratification produces longing after the drug and uneasiness, in the case of all the three drugs.

45. Evidence on these points is conflicting. Some of the consumers maintain, others deny, that evil effects are produced.

46. Habitual excessive use sometimes produces insanity, and causes most of the evil effects referred to in question 45.

47 and 48. No.

49. Yes, sometimes. It is not so used by prostitutes.

50. Excessive use will produce impotence in some cases.

123. Evidence of ASSISTANT SURGEON DEVENDRANATH ROY, *Brahmin, Teacher of Medical Jurisprudence, Campbell Medical School, Calcutta.*

1. Being in Government service for over twenty years, I have been, among other places, in Rajputana, the North-Western Provinces, Behar, and Bengal, where hemp drugs are used by a large portion of people. Latterly, since 1884, I have been in charge of a ward of the Campbell Hospital, where, among others, lunatics are treated, and many of them do use those drugs.

2. In places where I have served Dr. Prain's nomenclature is known, and is used for the preparations of hemp.

19. Yes, only for smoking.

20. As far as my information goes, the lower classes of people of the North-Western Provinces, Behar, and the Eastern Districts of Bengal smoke

ganja in large number. In those places charas is not so much smoked. About 20 per cent. of the population use those drugs. The number of the "bhadrak" class of people in East Bengal using those drugs is greater than in any other place that I know of.

21. Chur is preferred.

22. I do not know of any besides the native.

23. Only as a substitute for ganja, when that is not available.

24. Those who are habitually accustomed to take bhang, always drink it. Only when they have no time or place to make it into a pulp, it is eaten, and not otherwise that I know of.

25. Probably the use of ganja is on the increase. For I have heard people who are classed as "bhadrak," and who have some education too, but being of straitened circumstances cannot afford to indulge in expensive intoxicating drugs, do smoke ganja. Formerly people of their rank and status would never have done so. There are a good number of people also in the eastern districts of Bengal who, after drinking spirits or wine, smoke ganja to make the intoxication more profound. This practice has sprung up within living memory.

26. Bhang and ganja—

(a) Pretty large.

(b) Not so large.

(c) Not many.

(d) Fewer still.

Charas is not so much used as the other two preparations, hence the number of its consumers will be less under each of the above headings. Bhang is consumed by the largest number of the above classes.

27. Subject to the above remarks, the kahars, dosads, kurmis, Muhammadans, and palki-bearers of Bengal, with exceptions here and there, are habitual moderate consumers. They contract the habit on account of the severe physical labour they have to undergo to earn their livelihood as coolies, syces, domestic servants, field labourers, etc. Hemp drugs, being cheaper than country wine, are preferred. Tradition may have something to do with some people.

Religious mendicants, both Hindu (including the Baisnavas who beg and sing) and Muhammadan, are as a rule habitual excessive consumers. They have more leisure, no domestic cares, and they have to make long journeys, and have also to be exposed to the vicissitudes of temperature; hence they indulge in those drugs. Among the well-to-do class both habitual moderate and excessive consumers are found.

28. (a) In Calcutta one pie worth of bhang will be consumed in three days, but one pie worth of ganja will be consumed in a day. About three drachms of the former and twenty grains of the latter are consumed a day.

29. Ingredients of bhang—(a) ordinarily, black pepper, (b) exceptionally, anise-seeds, milk, and sugar. Dhatura is so used to make the intoxicating property stronger.

Thandai and bhang massala are both sold by the North-West people. Of the former, cucumber seeds, almonds, and petals of rose form the chief ingredients; of the latter, cinnamon, cubebs, anise-seeds, black pepper, and coriander form the chief ingredients.

Dry tobacco is mixed with ganja when smoked.

30. Bhang, as a rule, is consumed in solitude. On occasions sanctioned by custom, it will be used in company. Ganja and charas often in company. As a rule males smoke ganja. Baisnavas in Lower Bengal, who earn their livelihood by begging and singing songs, both male and female, smoke ganja. I have seen children whose parents habitually drink bhang take a few sips from their father's cup. Girls do not drink it.

31. Yes, easily. It is difficult to break off the habit, especially of ganja. Ganja from moderate habit develops into the excessive.

32. Throughout Bengal on the *Dassera* day friends and relatives meet and exchange greetings, and then a cup of bhang and sweets are offered. It is not incumbent that it should be drunk. Some to acknowledge the good feeling that prompts the offer literally take a drop or two; some again think that it is a part and parcel of the religious occasion which has gathered them, hence take a sip or two. Those who are inclined to be merry take a few sips more. For they know, even if they were to be worse for it, society will tolerate the indiscretion; consequently they feel they are at liberty to take as much as they like. Those who go to excess, instead of being merry, rather suffer severely: so much so, that doctor's help is sought. Indulgence once a year cannot, and does not, lead to the formation of the habit. I know some who having had a bitter experience of their indiscretion rather avoid it on all future occasions. When it is taken in extremely moderate dose, it is only then that the sensation is not altogether unpleasant; it brings on dryness of the throat and tongue and a sensation of heat all over the body, which are not pleasant; but all sounds, whether one's own voice or that of others, more especially musical, seem to have a sweet cadence: that is the only pleasantness which it produces. It takes away the sensation of fatigue as well as increases appetite; these qualities of the drug actually lead one to take it oftener.

It is incumbent on the (Saivas) Siva worshippers to smoke ganja on the Sivaratri. It has got the sanction of their religion; perhaps the use of it from a very long period has at last given the social custom the sanction of religion. I do not know of any custom, social or religious, which permits of smoking charas.

33. The consumption of bhang is not regarded as so objectionable as that of ganja and charas; nay, the use of the latter drugs is always regarded by the public to be disreputable. The Hindu religion does not countenance nor sanction the habitual use of any intoxicating drug whatever.

Excepting bhang, the other two preparations, even when moderately consumed, bring in disorders of mind, *viz.*, irritability of temper, delusions, insanity, and carelessness chiefly—so much so that whenever any one gives any exaggerated description of anything, or does anything that is absurd, people in Bengal stamp them with their disapprobation by saying that none but a ganja smoker will do or say such a thing. The body also suffers with the mind, more especially when there is want of good food. So anything that will deteriorate the mind will naturally be put down as bad by everybody, irrespective of the other effects on the society. I do not know of any custom of worshipping the hemp plant.

34. Bhang is less offensive, so it will be a great hardship on them to forego its consumption. To ganja and charas smokers it will be privation as well, but it will not be a hardship on them consid-

ering the amount of good that will result from the prohibition.

35. I do not think it will be quite feasible to do so all on a sudden. Every attempt to consume it illicitly will be made. Prohibition will very likely lead to drinking, which will be more expensive, and the consumers will not be able to afford it; hence crime will increase. I do not think that it will lead to any political danger.

36. I do not think so.

37. Ganja intoxicates instantaneously and profoundly. Charas is less intoxicating: it makes one dull; whereas when not taken in excess, makes one lively. The effect of the former lasts longer than that of the latter.

38. Chur is more preferred for its greater intoxicating property.

39. Smoking any preparation of the hemp is more injurious than drinking or eating any portion of it; because in the gaseous form its active principle is directly absorbed in the blood through the lungs, and the effect is instantaneous, whereas when taken in solid or liquid form absorption through the stomach is slower; and by the time its full physiological effect is produced, at least some portion of it is eliminated through the excretory organs.

40. In ancient Sanskrit books on medicine bhang is only mentioned. Its synonyms are siddhi, ganja, matulani, madini, bijaya, and jaya. It is used by kabirajes for its medical properties. Ganja is not mentioned in Charaka or Shusrata. In Tantrik books it is mentioned. There it is called ugra and not ganja. It is used by kabirajes as a medicine. Charas is not mentioned in any of these books. I do not know of any of these drugs used for cattle disease, but bhang mixed with turmeric and treacle is given to horses and bullocks after fatiguing journeys.

41. Habitual moderate use.

(a) Bhang is digestive, but not food accessory.

(b) Ganja is considered to give more staying-power, and alleviates fatigue than bhang. Both have similar properties.

(c) None of the hemp drugs is considered as such.

(d) They are stimulants, hence used as such by people living in unhealthy places as well.

All classes of people, rich and low, use bhang and ganja for purposes indicated under (a) and (d). Only the poor, who have to undergo severe bodily labour to earn their livelihood, use for purposes indicated under (b).

42. I do not consider it harmless because it affects the brain. Any agent which causes derangement of it by stupefying it cannot be harmless when such condition is produced habitually.

43. Yes.

44. To habitual consumers they are intoxicating, hence refreshing. They do not allay hunger. Only bhang creates appetite. Three or four hours will be the longest time for their effect to last. The after-effects are not marked. There is always a longing for the drugs, but that is marked at the hour for their habitual use.

45. Those who smoke ganja not more than twice or thrice a day and can afford to get good food, do not suffer in general health; but the absence of good food will make the ganja-smoker deteriorate in health. Mentally and morally all

smokers fare alike. They become short-tempered and careless. Bhang does not impair digestion, whereas ganja does. Those of my patients who admitted of having been habitual ganja-smokers suffered from dysentery or diarrhoea, but they had been exposed to conditions which produce those ailments. Hence I do not draw any conclusion as to ganja being the primary cause of those diseases. Barring what I have indicated above, I have not seen a moderate ganja-smoker becoming lazy or a debauchee. Charas stupefies the smoker, hence he becomes indolent and dull to all moral sense. I do not know of any instance of moderate use of hemp drugs producing actual insanity. But it should be remembered what I call moderate use, *i. e.*, two or three times a day. Insanes who have no recorded ganja history do confess to the use of the drug. This confession comes when the patients are calm enough either to understand or to listen to what is said to them; otherwise nothing can be got out of them, even whether they are hungry or not. The other portions of this question will be answered in reply to the next question. I know of persons becoming insane after the use of intoxicating drugs, and ganja especially, and they had no hereditary predisposition. I do not know of any case in which insanity predisposed to the use of it. Persons deficient in self-control through weakened intellect will take to any intoxicating drink that they have facility to get, and will contract the habit of using it more easily than any other person.

Hemp, like other narcotics, is not used to soothe the brain. Dr. Reynolds speaks highly of Indian hemp as *sometimes* altogether removing pain in the head from a rare disease, cerebral tumour.

46. Since 1884 I have been in charge of the ward where lunatics are treated. During this period I had a large number of cases of insanity under my observation, and I have given below the statistics of 263 cases in a tabular form, showing how many of them were addicted to any intoxicating drug, and that in excess.

	Hindus.	Muham- madans.	Christians.	Other castes.	Total.
No history of in- toxicating drugs could be obtained	96	36	■	25	163
Ganja	40	7	0	■	49
Ganja and Opium	13	4	1	2	20
Alcohol	12	6	1	2	21
Senile dementia	7	0	2	1	10
TOTAL	168	53	10	32	263

In my ward there is no voluntary admission of lunatics. They are brought in by the Police whenever they are found to wander about on the streets of Calcutta. Sometimes the patients are perfect strangers, consequently no previous history can possibly be obtained. I do not draw any conclusion from the large number of patients, having had no history of using intoxicating drugs. Ninety of the total 263 cases did give history of using some sort of intoxicating drugs, and which were stated to be the causes of insanity. Of those 90, 69 used either ganja alone or with another narcotic. This will show that the number is not few. Amongst the ganja-smokers no history of hereditary taint is obtained. An exceedingly small number of patients did give such history, and they are included with patients mentioned in the first heading.

Character of insanity caused by ganja varies, but the majority of them become violent. From

my hospital records I find that out of 49 purely ganja cases 24 were violent, 7 boisterous, 6 talkative, 1 suicidal, 9 had large delusions, and 2 were religious maniacs. The practice in the Campbell Hospital is to send away lunatics to Dullunda, or to make them over to their relatives when they have lucid intervals, so re-admissions are not very frequent; but in my private practice I have found relapses always follow whenever the old habit of using hemp drugs is resumed. I know of people who when very young, about 17 or 18 years old, contracted the habit of smoking ganja, and within a short time they became inveterate ganja-smokers. After some four years or so they became insane temporarily. There was no family history of nervous disease of any sort.

47. No. I do not think that such children suffer from any nervous disease.

49. In small doses used as aphrodisiac. I do not know whether prostitutes use it for such purposes, and my information goes to show that it is not much used by them for such purposes. Not more injurious than other narcotics. I do not think it tends to produce impotency.

51. Not that I do know of. As far as my experience goes, the moderate use of these drugs has little or no connection with crime.

52. I cannot remember of any definite case.

53. Excessive indulgence in ganja does incite to violent crime. I know of a certain individual who came from a good family, and who contracted the habit of smoking ganja very early. At last he became insane. One day, after he had taken ganja he attacked a female relation of his, and killed her. On judicial enquiry he was found to be insane, and thus escaped the extreme penalty of law.

54. I have heard so.

55. Not that I know of. Complete stupefaction cannot be produced by preparations of hemp unless the quantity be very large, which itself will produce suspicion in the mind of the intended victim. In McLeod's book of *Medico Legal Experience*, page 115, only one case of death from bhang poisoning is mentioned. It was reported from Benares, but the issue of this case was not stated in the original. Majum, a preparation of bhang by boiling it in milk, and sweetmeats prepared with that milk. Two cases of poisoning by it are reported from Hoshangabad by Dr. P. Cullen in the "*Indian Medical Gazette*" for June 1868. It was not administered with the intention of causing death, but to effect a criminal purpose.

56. The ingredients I have mentioned before, and which are mixed with bhang, are used to make the drink palatable. Dhatura is mixed with bhang for personal consumption. I do not know the mixture to have been used for criminal purposes; it is quite possible to be thus used though.

57. I do not know of such instances.

Oral evidence.

I entered Government service in May 1873. My medical degree is L. M. S. of Calcutta.

Question 20.—Here I speak of the percentage only of the districts mentioned. I take 20 per cent. of the entire population. Consumers are 30 per cent. of adult males. About 10 per cent. of women take bhang also. Of children the percentage would be little over *nil*.

Question 25.—I know several people in my social experience of Eastern Bengal people, who smoke ganja to make the intoxication of drink

more profound. They call it "chabuk" (or whip). My experience of Eastern Bengal is very limited; but I see many of the people here. I know a hundred well-to-do people from Eastern Bengal, and specially from Mymensingh, who have this double habit. I do not know of any special circumstances in Mymensingh which could explain this. It is the force of example. I have seen the double habit in syces and palki-bearers, but not as a rule among the labouring classes.

Question 29.—Dhatura is only exceptionally used.

Question 37.—My statement regarding charas is based on the statements of some mendicants, to whom I gave charas. They said it was weaker than ganja. I have no theory to offer as to this. I have not thought over it.

Question 46.—I have before me the bed-head tickets on which I base my figures in this answer. I was assisted in preparing the figures by my students. I made the entries as to cause when the patients were under my treatment. I have charge (under the Superintendent) of the pauper insanes who come to the Campbell Hospital. The Superintendent is also Police Surgeon. These entries were made on each case in reference to that case alone, and not in pursuance of any general enquiry. They were made in connection with the reports which I have to make on such cases to the Superintendent, with a view to his deciding how they are to be disposed of. These entries are based (a) some on the information supplied by the police on the descriptive roll, (b) some on information given by relatives or friends; this is a small proportion of the cases, as most of the insanes are strangers to Calcutta; and (c) some on information given by the insanes themselves. No entry of information based on the last two sources of information would be entered in the descriptive rolls. It would not go out of the Hospital. I have no authority to make entries in the descriptive rolls. It is not part of my duty or of the duty of the Police Surgeon to certify as to cause.

I invite attention, as an example, to the bed-head ticket of Dharma. In this case I ascertained that the lunatic used ganja and bhang. Because I ascertained this I put this down as the cause of insanity. It is not put down how much he used, but it was said that he used it often. This is not put down, but this is my impression. If a man used any intoxicating drug often, I would accept that as a cause of the insanity; not necessarily the only cause. I should not consider it necessary to prove actual excess. If he took it habitually, that would be enough. The reason is that I have seen people of weak mind, who, if they take any intoxicating drug, go to excess. Hence, when I get the history of any insane taking these drugs, I do not stop to enquire whether it is in excess or not. If there were any peculiarity in the insanity, I should go on to enquire as to other causes, but not otherwise; for it is not my duty to do more really than ascertain the fact of insanity. By "peculiarity" I mean suicidal tendency or religious mania or monomania or dementia. I would go on to further inquiry as to these cases; because they are the cases which are generally hereditary. Apart from hereditary tendency, ganja cases are simply violent, and have not those characteristics so marked; but they exist. It is a mere matter of degree.

The only causes shown in the 263 bed-head tickets are drugs of various kinds and epilepsy. There were six cases of epilepsy. In all of these

cases the patient had a fit in the ward. This tends to show that it is impossible for me to find out any cause that I do not see. That is the case. By enquiry I may ascertain the use of a drug; or by seeing a fit of epilepsy I may find out that

cause; but, apart from that, it is almost impossible for me to ascertain a cause.

I know of no literature dealing with hemp drug insanity. I am teacher of Medical Jurisprudence, Campbell Medical School.

124. *Evidence of* ASSISTANT SURGEON AKBAR KHAN, *Teacher, Temple Medical School, Patna.*

1. I have had no other and better opportunities of obtaining information regarding the matters connected with hemp drugs in regard to which my answers are framed than that I have at times observed some accidental cases, and that I have referred to many persons using these drugs moderately and excessively, especially some jogis and habitual smokers of ganja.

2. The definitions given of siddhi or bhang, charas and ganja by Dr. Prain appear to be correct, and may be accepted for this province.

Baluchar ganja is sold here generally. Bhang is known here by the name of bhang or sabzi, charas by charas, and ganja by ganja.

19. Ganja and charas are used only for smoking. They are not put to any other use.

20. Jogis, sanyasis, fakirs and lower classes of people smoke ganja largely.

21. Flat ganja, which is called baluchar ganja in this place, is preferred for smoking.

22. Foreign charas is chiefly used, and it is obtained from Nepal, Kashmir and other high lands.

23. Bhang is generally used for drinking and not for smoking. But when the habitual smoker of ganja and charas has got none in his possession, he then, with great reluctance, uses bhang for smoking only to satisfy his mind; but this does not satiate his craving so much as ganja or charas would do.

28. The average allowance and cost of each of these drugs is per diem to—

- (a) Habitual moderate consumers, allowance or weight from $\frac{1}{8}$ to $\frac{1}{4}$ tola, cost from $\frac{1}{2}$ to 1 anna. (b) Habitual excessive consumers, allowance or weight from 1 to 2 tolas, cost from 4 to 8 annas.

29. (a) Dried tobacco leaves are ordinarily mixed with ganja, khamira (of tobacco) with charas, and black pepper with bhang. (b) Nothing is mixed exceptionally with ganja and charas. Raisins, pistachio nuts, almonds, etc., milk, sugar, saffron, seeds of cucumber, leaves of rose flower, rose water, cardamom, musk, aniseed, black pepper etc., are exceptionally mixed with bhang.

The admixture of bhang in (a) is used by the poor and that in (b) by the rich who can afford to buy all these. Dhatura is never mixed with any of these drugs. The object of admixture in ganja and charas is to diminish their intoxicating power to some extent. As regards bhang, the admixture makes it cool, refreshing, and palatable.

Preparation of bhang massala is generally sold by grocers. The ingredients are almost the same as mentioned in (b).

30. If the consumption of each of these three drugs is practised in solitude small quantities are used; but in company large quantities are consumed. It is mainly confined to the male sex. Females, but very few, perhaps only 5 per cent. use these in some disease. Men in youth use these more than at any other time of life. It is not usual for children to consume these drugs.

31. The habit of consuming these drugs is formed easily; but it is difficult to break it off when once acquired. There is a tendency in the case of any of these drugs for the moderate habit to develop into excessive.

32. There is no custom, social or religious, in regard to the consumption of any of these drugs.

33. The consumption of each of these drugs is generally regarded as only a thing of habit. It cannot be said that there is any public opinion (social or religious) in regard to the practice. There is no custom of worshipping the hemp plant.

34. I think a consumer of the drug he uses, would feel somewhat dull and unmindful of his duties if he have to forego the consumption. I do not think that any thing serious would happen to him.

36. There is no reason for thinking that alcohol is now being to a certain extent substituted for any of these drugs.

37. The effects of charas-smoking differ from those resulting from ganja-smoking in a larger amount of heat and excitement being produced by the former than by the latter. Charas is more heating than ganja. And the drinking of bhang differs in its effects from either or both of these in its being cool and refreshing, and bhang is milder in effect than any of the two.

39. Charas and ganja are not eaten or drunk. They are only used for smoking. Bhang is drunk and is not so much injurious, while its smoking has no effect at all. The general effect of the drugs on the constitution is not injurious. There is no tendency towards producing insanity.

40. Preparations, such as tincture and extract of *Cannabis indica*, are prescribed on account of their medicinal properties. Bhang is sometimes used for its soothing effect in the form of poultice and fomentation in piles. Ganja and bhang are used in the treatment of cattle disease.

41. The moderate use of charas, ganja or bhang is supposed to be beneficial in its effects—(a) as digestive; (b) as refreshing after fatigue and exposure; (c) as a febrifuge to some extent; (d) as a producer of excitement in doing works promptly and willingly.

42. I consider the moderate use of any of these drugs to be harmless for reasons described in 41.

43. The moderate consumers are inoffensive to their neighbours.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumer is

more or less excitement and congestion of eyes. It is refreshing. It produces a little intoxication. It does not allay hunger, but it creates more or less appetite. Its effect lasts for two or three hours. There are very little or no after-effects. The want of subsequent gratification produces some longing and uneasiness.

45. The habitual moderate use of any of these drugs does not produce any physical, mental, or moral change. It does not impair the constitution in any way. It rather increases the appetite and keeps the digestion in order. Charas and ganja cause dysentery, bronchitis, and asthma if the consumers are not well fed. It does not impair the moral sense or induce laziness or habits of immorality; but new smokers feel inclined to debauchery to a more or less extent.

It does not deaden the intellect or produce any real insanity. I know of some cases in which it produced some insanity which appeared to be merely an exciting cause and of a temporary nature. I had no opportunity of seeing the symptoms re-induced by the use of the drugs after liberation from restraint in the cases that I saw. The symptoms in such temporary insanity are not at all typical. They consist only of some excitement of the brain, with either loss or increase of appetite, from which he recovers shortly after. I have not seen or heard of any case in which there existed any connection between insanity and the use of hemp. What it produces is only some temporary disorder of mind and no insanity in its true sense or literal meaning. I wish to illustrate this fact by an example, which will throw some light upon the subject. A respectable friend of mine was once given some sherbet to drink in which a large quantity of bhang was mixed. A few minutes after he felt as if he were once lifted to heaven and thrown down again on the earth. His whole body, especially the head, became hot, and his eyes reddened and seemed as if they were shooting out. His senses became very acute. He laughed at one moment and cried at another, and passed a whole night and half of the next day in this condition. The symptoms then passed away and he came to himself again. His mind was all the while quite clear. One who had no knowledge of his previous history would not but call him insane if he saw him in the condition described above; but this was no insanity. It was only a temporary excitement of the brain, which passed off after some hours. Hence I am

inclined to believe that there is no connection between permanent insanity and the use of hemp.

46. The same as 45, with the difference that the excessive use of any of these drugs produces some physical change, such as emaciation and broken constitution.

47 and 48. The habitual moderate use of any of these drugs is not hereditary. Nor does it affect in any way the children of the moderate consumer.

49. The moderate use of ganja is sometimes practised as an aphrodisiac. Prostitutes use it for the same purpose. The use of the drug for this purpose is more injurious than its use as an ordinary narcotic, because it forces only a temporary and slight excitement for the time, weakening the power of the nerves gradually if repeated. The use of hemp does not produce impotence.

50. The same as 49; the difference being that the excessive use of any of these drugs does not make any change in the sexual power.

51 and 52. Moderate consumption of any of these drugs is not confined to bad characters. The consumers are scarcely known to have committed any crime in general or of any special character.

53. No.

55. The criminals, in order to further their designs, induce their victims to partake of these drugs and so stupefy them; but complete stupefaction cannot, perhaps, be induced by any of these drugs without admixture.

56. The admixture of other substances in moderation or excess makes the drugs more or less mild. Dry tobacco leaves and khamira (of tobacco) diminish the effect of ganja and charas respectively. Rose water, raisins, etc. (mentioned in 29) make the bhang milder and cooler. I do not possess any information regarding the admixture of dhatura, nux vomica, cantharides, opium or betel-nut for personal consumption or for administration to others.

57. I do not know of any case in which ganja or charas is said to be eaten or drunk.

I know of one preparation called majum which is made with bhang, and which produces only some pleasant effect upon the mind. The man under its influence goes on laughing and seems to be quite jolly.

125. Evidence of Assistant Surgeon SOORJEE NARAIN SINGH, Kayasth, Bankipur.

I have been Assistant Surgeon for the last 28 years; was in charge of dispensaries in Darjeeling, Gaya, Behar (Sub-division), Civil Medical Officer of Deoghur, Teacher of Materia Medica and Therapeutics and Medical Jurisprudence in Dacca Medical School, and Medical Visitor of the Dacca Lunatic Asylum. I am now Teacher of Materia Medica and Therapeutics, Temple Medical School, Patna, and a Medical Visitor of the Patna Lunatic Asylum.

2. Yes, the definitions correspond with the local acceptance of the terms. In Behar the terms siddhi, subji or patti are not popularly used; bhang is the popular term.

19. Ganja and charas are generally used by the people for smoking. Ganja is rarely eaten. Charas, however, is eaten or drunk in solution by a limited number of the dregs of the populace, especially of the Arab and Negro community.

20. Ganja is used by many of the well-to-do idle Hindus in Behar, sparingly so by that class of people in Bengal. It is used largely by the low castes of Bengal and Behar, especially of the latter place. The worshippers of Mahadeva, as a rule, and fakirs and sanyasis, more or less, of all denominations use it. But the Vaishnavas of Bengal, the Dandis, the Nirmalas, the Akalis and Udis of the Nanak Shahi sect, and many others never use it. Many mendicants and most of the dissipated and depraved use it. Charas is less used, as the generality of people can ill afford to buy it. It is a favourite intoxicant with many of the well-to-do Muhammadans leading a dissipated life. Hindus do not use charas so much, probably because it is collected on leather.

21. Flat ganja is more largely consumed than the round or chur, which, however, are considered to be of a superior quality and more expensive.

22. Mirzapur or Nepali charas is chiefly used in Behar, but Herat charas is considered the best.

23. Bhang is sometimes, though very rarely, used by the indigent in outlying places for smoking, when ganja is not available.

24. In Behar, the North-Western Provinces, the Punjab and Orissa bhang is a favourite drink of a certain class of Hindus, especially of the upper castes to whom spirituous liquor is prohibited. The Brijobasis of Mathura and the people of Rajputana are well-known bhang drinkers. In Bengal the use of bhang is very limited and is indulged in generally on particular ceremonial occasions; as for instance, on the Bijoya Dasami day of Durga Puja with the Bengalis. Many up-country men—Hindus—living in Bengal, especially most of the darwans employed in the mercantile houses, and wealthy native gentlemen of Calcutta and other large towns use bhang as a daily drink. By the dissipated of all classes—Hindu or Muhammadan—bhāng is drunk or eaten as majum.

25. The use of ganja and charas is on the decrease; that of ganja less so. The chief reasons for this decrease are (1) spread of education; (2) increased duty on hemp, and (3) cheapness of outstill liquor.

26. The percentage ratio of consumers under each of the four groups in the question may be roughly put as follows:—

	Bhang.	Ganja.	Charas.
(a)	75	80	70
(b)	10	15	15
(c)	10	3	10
(d)	5	2	5

27. Consumers of bhang, habitual or occasional, are mostly Hindus. Of these the Brijobasis and other priests of pilgrimages, who are sumptuously fed by the pilgrims and who lead idle lives, use bhang principally to increase their appetite and to while away idle lives. Native soldiers, police constables, and darwans use it to enable them to endure hard work and excite in them a spirit of bravery and cheerfulness. Sanyasis and fakirs use it to allay thirst and hunger, endure privations, and fix the attention. The dissipated (Hindu or Muhammadan) use it as an aphrodisiac and to any quantity, habitually or occasionally. Ganja is indulged in also by the above-named classes of people for the same purposes as above, and they use it habitually in moderate or in excessive quantities. Besides these men, low caste people of Bengal and Behar (especially of the latter) and the beggars use it moderately as a necessity of life, such as to ward off effects of damp, allay thirst and hunger, endure fatigue, etc. The dissipated use ganja more than they use bhang. *Charas*.—This is used chiefly by the well-to-do and dissipated persons, either occasionally or habitually, in moderate or in excessive quantities, for its exhilarating and aphrodisiac effects.

28. Habitual moderate consumers require one or two pice worth ganja a day, namely, 24 grains. Habitual excessive consumers require up to two annas' worth ganja a day, namely, 96 grains. About two tolas weight of bhang is the average daily allowance for a habitual moderate consumer. The excessive consumers may take more.

29. Bhang is ordinarily taken with black pepper by the Hindus, especially of the poor class. The well-to-do Hindus and Muhammadans use a more elegant preparation. In addition to the

black pepper they mix it with cucumber and melon seeds, sugar, milk and water, or better still with rose water. This mixture is supposed to have a cooling effect, and as such, is a favourite drink in hot places, but it is more intoxicating. Dhatura is sometimes added to increase the intoxicating effect. Majum or hemp confection is a preparation of bhang, made with sugar, butter, flour, and siddhi or bhang. Sometimes otto of rose is sprinkled with the mixture during the process of making majum cakes to add to the flavour and elegance of the preparation. Sometimes, by special order of the customers, dhatura seeds are introduced to add to the intoxicating power. Majum is a very intoxicating preparation; in fact it is an extract of bhang made into confection, and is chiefly used for its pleasingly intoxicating and aphrodisiac effects. Bhang masala consists of souf (anise seeds), kasni (a species of succory), khira and kakri seeds (cucumber), black pepper, cubeb, cardamom seeds, kabu (garden lettuce), karfa. Ganja and charas are smoked with tobacco. I do not know of opium, nux-vomica, cantharides or betel-nut being mixed with these drugs.

30. Ganja and charas are generally used in company; bhang generally in solitude, or at times in company. The use of these drugs is mostly confined to the males; females rarely use them. Children of low castes may use ganja.

31. The habit of consuming any of those drugs can be easily formed. It is not very difficult to break off the habit. This can be done with a little determination, and more easily than the habit of opium-eating or alcohol-drinking. A moderate use of any of these drugs may, like that of any other narcotic, develop into the excessive, especially in the case with dissipated and depraved men. The lower class, however, stick to their moderate dose.

32. In Bengal there is an occasional social custom of offering bhang and sweetmeats to friends on the Bijoya Dasami day; with the Beharis and up-country men there is a similar custom during the Holi festival. It is not essential that they should use bhang on these occasions. The better class of people do not use it. The pleasure-seeking indulge in it for merriment. Habit is not formed by such use.

The lower order of Mahadeva worshippers indulge in ganja-smoking, moderately or excessively, according to their individual temperament. Habit may be formed, and when carried to excess, may be injurious.

33. The consumption of any of these drugs is not regarded favourably by the educated. But, judging them *inter se*, bhang is not so much in disrepute as ganja or charas. Manu strictly prohibits the use of ganja by the Brahmans; and the upper class Muhammadans religiously avoid it.

34. It will be a serious privation to the Hindu consumers of the drug, especially the sanyasis, Brijobasis, native soldiers, and darwans, who cannot substitute alcohol for this drug owing to religious prejudices. I think about 50 per cent. of the population in Behar and the up-country are consumers of bhang and ganja; in Bengal, their number may be 20 per cent.

35. The prohibition of the use of these drugs is feasible. There must be illicit consumption; but the prohibition may be enforced by gradually increasing the duty to the highest rate. Any sudden prohibition may be attended with disturbance. At the same time it is certain that a large

number of the consumers of hemp who are not orthodox in their faiths will have recourse to alcoholic stimulants or other drugs, such as opium, dhatura, etc.

36. In India bhang and ganja were the principal intoxicants from time immemorial. These have been, to a certain extent, replaced by wine owing to (1) high duty on hemp, (2) cheap outstill wine, (3) import of European wines. The import of European liquor has been the cause of diminishing the use of hemp and of increasing the use of alcohol in Bengal and Behar.

37. Charas is considered to be more mildly intoxicating than ganja. But the intoxication lasts longer. It serves the smokers both for wine and opium. From bhang-drinking intoxication will ensue in half an hour, and last two or three hours, whereas in ganja or charas-smoking intoxication ensues almost instantly, and lasts about an hour or so. Excessive drinking of bhang is more injurious than smoking ganja or charas. Excessive and continued use of bhang induces a state of frenzy and is more likely to bring on insanity than such use of ganja-smoking. The general constitution also suffers more from excessive use of bhang-drinking.

38. As the chur and round ganja contain more of the resinous matter, they are more intoxicating than flat ganja.

39. Smoking of ganja or charas is less injurious than eating or drinking the same, or excessive drinking of bhang or eating majum, because the effect of smoking is less intense and more evanescent in its character. Besides, when any of these preparations are drunk or eaten, the digestive system is more taxed, and disorders of digestion with its attendant consequences, dyspepsia and diarrhoea, follow. Charas, if eaten in sufficient quantity, produces deep insensibility, and sometimes followed by that peculiar nervous condition known as catalepsy.

40. Native physicians, hakims and kabirajes use preparations of hemp plant (*Cannabis indica*) in the treatment of various diseases. Siddhi is used in the treatment of diarrhoea, dyspepsia, gonorrhoea and seminal debility, also as a diuretic. Externally its powder is applied to fresh wounds and sores to cause granulation. A poultice of the boiled root and leaves is applied for discussing inflammation and cure of erysipelas and for allaying neuralgic pains.

It is also considered a very useful remedy in the European system of medicine.

It has been used in the treatment of tetanus in horses and proved useful. It is sometimes used in the treatment of cattle diseases.

41. (a) The moderate habitual use of bhang does increase the appetite, and the consumers seem to thrive well, for instance, the Brajobasis of Mathura and many of the up-country Hindus. Such use of ganja or charas also increases the desire for food in many, although the consumers can seldom take much food. In fact ganja or charas ultimately extinguishes appetite. The appetising effect of bhang also is an abnormal one. (b) All the preparations of the drug, if moderately used, serve to alleviate fatigue, as also give staying power under severe exertion or exposure. The sanyasis, fakirs and poor working classes use the drug for this purpose. (c) It is not an established fact that any of these drugs act as a febrifuge, but persons using them are seen to a certain extent escape the effects of malaria and of damp unhealthy tracts—such as boatmen, fishermen,

cultivators of marshy land, etc. (d) Bhang is occasionally used in moderate doses by all classes of Indian people in diarrhoea, dyspepsia, gonorrhoea, and various other diseases.

42. Although its effects may appear to be beneficial for a time and under certain circumstances, the habitual moderate use of the drug cannot be said to be altogether harmless, especially in the dissipated. The consumers of ganja and charas generally look thin and ill-nourished and they often become cross-tempered dull and inactive. Moderate use often leads to excessive, especially with the dissipated.

43. Generally inoffensive, but some persons become cross and quarrelsome and mischievous.

44. The immediate effect of bhang is generally refreshing, exhilarant and appetite-increasing, also said to be aphrodisiac. No doubt it is intoxicating with the novice or in excessive dose. The effect lasts for two or three hours, sometimes longer. The after-effects are dulness, heaviness, sleep, and a sort of giddiness on awaking. The immediate effects of ganja are heaviness, laziness, agreeable reveries. It also increases the appetite, and its effects last for an hour or so. The immediate effects of charas are the same as those of ganja, only in a milder degree, but lasts longer. To habitual consumers of any of these drugs, the want of subsequent gratification does produce a longing and an uneasiness.

45. Habitual moderate consumers of bhang, ganja or charas do not apparently suffer from any injurious effect. On the contrary, they generally appear to enjoy sound body and mind, and retain intact their moral principles. The evil effects, if any, from such use of the drugs, especially of ganja and charas, are that the consumers at times appear thin and ill-nourished, also cross, dull and inactive. This, I believe, is due more to their poverty than to the toxic effect of the drugs. So long as these men are properly fed they thrive well; when ill-fed, they of course get emaciated. Habitual moderate use of any of these drugs is not known to have deadened the intellect or produced insanity.

46. The drugs, when excessively used, prove more or less injurious to the consumers; and the nature and magnitude of the evil effects depend much on the mode of living and individual temperament of these persons. The dissipated and the idlers suffer most because of their dissolute habits and want of outdoor work, probably not so much for the toxic effects of these drugs. The ascetic mendicants, who indulge in excessive use of ganja and bhang, but lead pure lives and regulated habits, are seldom seen to fare badly. Dissipated persons falling victims to the excessive use of the drugs often become miserably thin and haggard-looking, their digestion fails, and the general health breaks down. With some chronic bronchitis and dysentery may supervene and death ensue. Degraded morality in these persons is, I think, not so much the effect of ganja as of the bad life and association they lead. The intellect at times is deadened and insanity may be produced. This, however, is not a frequent occurrence, and may happen in those peculiarly susceptible to the toxic action of the drug. During my service of 28 years, I saw a few cases of insanity, or rather mental aberration, in persons who had been addicted to ganja smoking; but I cannot say whether there had not been a predisposition to insanity, or that other narcotics had not been used with ganja. Insanity, as met with in ganja smokers, is of a peculiar type closely resembling *delirium tremens*. It is a sort of dementia, characterised by a peculiar

gait, a cunning look, constant giggling and rubbing of hands. The subject is at times violent, and exhibits signs of excessive hunger or sexual excitement. Insanity of this kind is generally of a temporary nature, readily cured under proper restraint and treatment, and said to be as readily re-induced by resuming the use of the drug. Most of these men confess to the use of the drug; some deny. I know of no case of brain disease or mental anxiety where persons took ganja for relief and became insane; nor do I know, on the contrary, of insanes taking to ganja, because of deficient self-control and weakened intellect.

47. Heredity is never noticed in the causation of hemp-consuming habit in the offspring, although they may acquire such habit by evil company at home and bad training. In some cases of habitual moderate ganja-smokers the children are seen to suffer in physique and mental and moral powers:

48. As above, with greater force.

49. These drugs are often used by the dissipated and low class prostitutes as an aphrodisiac.

Persons using these drugs for this purpose are tempted to gradually go into excess. After each excitement there is a corresponding depression and a gradual decrease of mental and sexual powers, a general deterioration of health. To make good this depression and disability increased doses are taken recourse to which again only magnifies the evil consequences and eventually results in impotence.

50. Excessive use of these drugs as an aphrodisiac produces more injurious effects than its use as an ordinary narcotic—first, because the sexual indulgences are carried to an excess; secondly, because other deleterious substances, such as dhatura, etc., are often mixed with these drugs.

51. I should think that a comparatively large proportion of bad characters are habitual moderate consumers of ganja. Theft, gambling, and crimes which require cunning, shrewdness, fearlessness and premeditation are generally committed by this class of ganja-smokers. To smoke in company is one of the characteristics of ganja-smoking. If there be criminal minds in the company, every one of the members imbibe their criminal propensities, and slight causes, such as want of money, sense of insult, love of wicked amusement, fire them to commit theft, gambling, assault, and like crimes.

52. The same as above with this difference, that the subject becomes more cross-tempered and ready to do acts of violence, according to the individual temperament of the consumer.

53. I know of no case in which consumers of hemp drugs in excessive quantities were led to commit unpremeditated crimes.

54. Yes, many do so. Thieves and riotous people are often heard to smoke ganja before starting.

55. Criminals rarely use ganja to stupefy their victims. Bhang is said to have been sometimes so used. Perhaps the smell of ganja is a great bar. The unaccustomed may be completely stupefied by a large draught of bhang or by one hard pull of ganja. Those who are accustomed to the drug cannot, however, be so stupefied unless dhatura or some such drugs are mixed with ganja.

56. Tobacco is generally mixed with ganja and charas, and bhang massala with bhang to modify their effects. I have heard of dhatura being mixed with bhang, majum or ganja, either for personal use, or with a view to administer them

to others, but I do not know of nux-vomica, cantharides, opium or betel-nut being so used.

57. I have heard of ganja-eaters (though their number is very small) who fast deteriorated in health and who died of dysentery. I have no personal knowledge of cases of charas eating or drinking in solution.

Oral evidence.

I have the degree of L.M.S., Calcutta. I had to lecture on Medical Jurisprudence in Dacca, and had to notice duly in the course the subject of insanity. I have had, however, no special experience of insanity.

Question 29.—I read this statement about dhatura being mixed in bhang in Dr. O'Shaughnessy's book. I also heard from some who use majum of other consumers who, they said, also took dhatura in it. I have never seen it myself. I have never heard of the admixture of dhatura with ganja. It is with bhang as used in majum, that the shop-keepers make the admixture at the request of customers.

Question 34.—By 50 per cent. I meant half the adult males. But on reconsideration I think that is too high. I should say 30 per cent. of adult males. The estimate is a guess based on observation. I think the estimate for Bengal (20 per cent.) may be accepted. It is a rough estimate. My experience of Bengal is for Eastern Bengal principally. I have also had experience of Burdwan.

Question 35.—I had no other drug specially in mind when I entered, "etc." at the end of this answer. There are, however, other drugs to which I have heard that people might go, but I had none in my mind beyond dhatura and opium.

Question 39.—Apart from the theory stated in my answer No. 39, I have seen cases in which worse results seemed to be due to eating ganja than I have seen from smoking. I mean eating ganja in balls made up for the purpose. People who are not content with the effect of smoking do this. It is this excess that hurts. The ordinary drinking of bhang was not under my consideration in this question. That in moderation is much more harmless than even the moderate smoking of ganja.

Question 46.—In my comparison with delirium tremens, I am discussing the acute form of insanity. It is due not to an occasional bout (I have never heard of such a case), but to continual smoking. It resembles delirium tremens in the sleeplessness for nights together, the seeing of phantoms and running at them, the trembling and some such symptoms resembling delirium tremens. The peculiar gait, cunning look, constant giggling, and rubbing of hands mentioned in my written answer are additional symptoms. All the above symptoms are of a temporary nature. Sometimes they last for a time; sometimes they rapidly recover. Sometimes they only last twenty days or a month, or even sometimes for a less period.

From one excessive indulgence there would be violent intoxication, but I have no experience of this. All the cases that I have known have been of the habit, though in the case of some young people these symptoms have been developed from only a short period of the habit. They were cases seen in the asylums, of which I was official visitor, and also cases I have seen outside in private practice. Sometimes long lingering cases of insanity

are attributed to ganja, but I have no personal knowledge of this matter. There is a great deal of difference between alcoholic delirium tremens and the ganja temporary insanity I have been describing and they are easily distinguished. In the case of alcohol the man speaks sense, but has occasional and particular delusions. He has clear

mind otherwise. The ganja man has always hallucinations. The trembling of hand and tongue is not so much in the case of ganja as in alcoholic delirium tremens. Besides the giggling and other additional symptoms mentioned above are not found in alcoholic delirium tremens. The duration of the latter is also shorter than in the case of ganja.

126. *Evidence of Assistant Surgeon NEMAI CHURN CHATTERJI, Brahmin, Bhagalpur.*

1. I have had no special opportunities of studying the qualities and characteristic effects of hemp drugs; but living as I do at a place where cooks, menial servants, palki-bearers, and low class Hindus generally are addicted to ganja-smoking, and where bhang is freely drunk by darwans and even by men belonging to a better class, I have seen and known some of the effects produced by these drugs on their consumers. I have also known something of these drugs in my experience as a medical practitioner.

2. Bhang, charas and ganja.

19. So far as I know, they are used only for smoking.

23. I have never seen or known the smoking of bhang.

28. (a) Four and five *chillums* of ganja, cost 2 pice; and one pice worth of bhang. (b) Two bharis of ganja, cost 8 or 10 annas; and a annas worth of bhang.

29. I don't know of any admixtures. I don't know of any such preparation. But when bhang is drunk by well-to-do persons as a stomachic, they generally mix with the bhang aniseeds, cloves, cardamoms, dried rose buds, cucumber seeds, and such like things.

30. Bhang is generally drunk in solitude, and ganja smoked in company. Excepting female sanyasis (mendicants), I have not seen any female ganja-smoker or bhang-drinker. No; so far as I know I don't think it usual for children to consume any of these drugs, though a few low class boys, specially those whose fathers or guardians are addicted to the drugs, learn to use them while yet in their teens.

31. In my opinion the habit is, comparatively speaking, easily formed and easily broken off. A confirmed ganja-smoker or bhang-drinker does not feel the want of his favourite drug so keenly and has not the acute hankering after it which the confirmed opium-eater or alcohol-drinker has for his. I think there is a tendency in the case of these drugs, as in fact in the case of every intoxicant, for the moderate to develop into the excessive. But in this case the tendency is neither so rapid nor so marked as in the case of certain other intoxicants, and can be more easily checked.

35. The only custom that I am aware of is the drinking of siddhi (bharg), in the Lower Provinces of Bengal on the Bijaya Dasami day. It has now become a quasi-religious custom, and the use of the drug on that day is essential. On that day, after the immersion of the image of the Goddess Durga into water, friends and relatives visit one another's house and are offered siddhi (bharg) and sweets. I am inclined to think that the custom was originally a social one, though promulgated under the ægis of religion, as every Hindu custom is. On that day relatives, forgetting at

least for the time their old quarrels and ancient differences, embrace one another and drink siddhi in one another's house. Even those who don't touch or taste anything that intoxicates, must take the prepared siddhi on that day with the tips of their fingers and taste it. Siddhi is regarded by the Hindus as an emblem of peace and prosperity, hence it is offered for drink at that day along with sweetmeats. But apart from this emblematic use of the drug, I think there was originally another reason for its use. Bijaya Dasami is a day of hard work for the votaries of Durga, and some stimulant was found necessary to sustain their energies and also to alleviate their fatigue. Siddhi is mentioned in the Hindu medical books as a stimulant. It is also cheap, and hence possibly its use was resorted to. One day's use does not produce any injurious effects or form a habit.

36. No.

37. I have no experience of charas smoking.

39. I have no experience.

40. Ganja and bhang in their naked form are very rarely prescribed by the kabirajes of Bengal, but are occasionally used by the Missers of these places in certain diseases. They are, however, largely used in the composition of several native medicines both in Bengal and in Behar.

41. Those who smoke ganja or drink bhang say that these drugs are digestive, and they alleviate fatigue and give staying-power under exertion and exposure. Boatmen and people in East Bengal smoke ganja to prevent the consequences of damp and vicissitudes of climate.

42. I have not seen any bad effects produced by the moderate use of ganja or bhang, and hence I think that the moderate use of these drugs is harmless.

44. The immediate effect of ganja is said to be refreshing. I don't think it allays hunger for any length of time, but it is said to create appetite. Its want produces uneasiness and dullness.

45. I don't think that the habitual moderate use of ganja and bhang produces any noxious effects, physical, mental or moral.

46. The habitual excessive use of ganja impairs constitution, injures digestion, and may cause dysentery and produce insanity of delirious type and also roughens the temper and deadens intellect.

47 and 48. No. I don't think so.

49. I have reasons to believe that ganja and bhang are used as aphrodisiacs; but I have no further experience on the subject.

56 and 57. Have no experience.

127. *Evidence of Assistant Surgeon BEHARI LAL PAL, Sadgop, Krishnagar, Nadia.*

1. Personal experience.
2. Yes; siddhi, charas and ganja.
- 3 and 4. Not known.
5. I do not know.
6. I saw only few scattered hemp plants in Jessore district.
7. Not known to me.
- 10 to 12. Not known.
13. Is restricted in this district.
14. Not known.
15. I do not know.
- 16 and 17. Not known.
18. They quite lose their effects in time. But with ordinary care they may keep good for one year, I think. To prevent deterioration they must be kept in an air-tight case on an elevated place.
19. They are used in smoking in this district.
20. Sanyasis, boatmen, and fishermen.
21. I hear that chur is preferred.
22. Foreign, from Nepal.
23. Not known.
24. Up-country men generally drink bhang.
- 25 to 28. Not known.
29. Some spices and sugar are ordinarily mixed with bhang. I do not know of any preparation, such as "bhanga massala".
30. In company to a greater extent. Children seldom consume these drugs.
31. Yes; I hear that it is difficult to break off. In some cases moderate habit develops into excess.
32. It is a religious custom among the Hindus to drink siddhi in a temperate form on the Bijaya Dasami day.
It does not lead to the formation of habit.
33. Not known.
34. I think it would be a serious privation to the habitual consumers to forego the consumption of the drug they use.
35. I do not think it would be feasible to prohibit the use of these drugs. I believe that prohibition will occasion serious discontent among the consumers. Prohibition may be followed by recourse to alcoholic stimulants or other drugs.
36. I do not think that alcohol is being substituted at present for any of these drugs.
- 37 to 40. Not known.
41. (a) and (b) I believe so.
(c) I have no personal knowledge.
(d) Not known. Moderate habitual use is referred to.
43. Yes.
44. It is said to be refreshing, intoxicating, and it excites appetite.
45. (b) I believe so.
(c) I do not think.
(d) I heard several cases of dysentery occurred among ganja-smokers.
(e) I do not think.
(f) I think that ganja-smoking deadens the intellect and produces insanity—mania. Several insanes confess to the use of ganja.
(g) I have no special knowledge.
46. As in answer to 45.
- 47 and 48. I do not think.
49. (a) It is used as an aphrodisiac.
(b), (c) and (d) Not known.
50. In excessive use, I think, it produces impotency.
- 51 to 54. Not known.
55. (a) I do not think.
56. Admixture of dhatura increases intoxicating power.
57. Not known.

128. *Evidence of Assistant Surgeon HARI MOHAN SEN, Baidya, Chittagong.*

1. I have made a study of the subject with a view to determine the effects of the drug on the constitution of men. I have made personal investigations and examined cases.
2. These definitions are accepted in this province, and the local names are the same.
- 3, 4, 5 and 6. I know not much about the cultivation and growth of this plant.
19. Ganja and charas are used only for smoking.
20. Ganja is smoked by people of all classes more or less; but it is the labouring classes who are most addicted to it. The people inhabiting the Eastern Districts of Bengal are given to its use more than those of other localities.
23. I have never known bhang to be used for smoking.
24. Bhang is drunk or eaten chiefly by the middle class of people and only in time of festivities. The Marwaris, the religious mendicants from the up-country, sanyasis and bairagis use it habitually.
27. As regards the consumption of ganja I may divide the people under four heads:—
(a) Well-to-do, well-fed, leisured classes. They take to the use of the drug for the fun of the thing to occupy their vacant hours, and for the aphrodisiac properties of the drug. (b) Ill-fed labouring classes. They take to the use of the drug for they forget their miseries while under its influence. (c) Criminal classes, robbers, dacoits, etc. They take it as an excitant and a concentrator of forces. (d) Religious mendicants take it for helping mental abstraction and deadening

carnal sensibilities, as hunger, thirst, etc. Siddhi is consumed by the well-to-do people to "cool the system when it is very hot," for certain excitement and as medicines when the bowels are out of order. Religious mendicants take it for the same purpose as that for which they consume ganja.

29. Ganja is smoked by itself and siddhi is taken as drink mixed with sweets and spices or eaten with bread (luchis). The object of the admixtures is to make it palatable and increase its strength.

30. The consumption of siddhi is practised in company on occasions; the habitual consumers take it by themselves but not for privacy. Ganja is smoked in solitude as a rule, or in select and private company. Adult males and prostitutes use ganja and siddhi.

31. The habit of consuming ganja is easily formed among the people of the low classes. It is difficult to break off. There is a tendency for the moderate habit to develop into the excessive. As regards siddhi, the habit is not so easily formed; it is easy to break off; and there is not much tendency for the moderate habit to develop into the excessive.

32. There is a custom among the people of West Bengal to drink siddhi on the last day of the puja during the Dassara festival. Even children are given to drink it. It is not essential. Only a little is used. The custom, however, has been almost done away with. I knew it as a boy. I do not see it now. In Eastern Bengal the custom is unknown. It is likely to lead to the formation of the habit and is otherwise injurious. There is no custom, social or religious, of using ganja.

33. A ganja-smoker is regarded as an outcast of society. "Ganja-khor" and "ganjel" are terms of opprobrium. They have no position in society and are looked down upon. They are pests of society, shunned by all and never pitied by any. There is a strong public opinion in regard to the practice. A "ganja-khor" (smoker) is a ruined and wrecked man; he is potent for mischief and may be up to anything. He may commit murder with an easy conscience. There is no act that he will not do. Hence is the strong sentiment against him. When strongly under the influence of siddhi a man may be as bad as a ganja-smoker, but the moderate drinkers are not generally so regarded.

34. It would not be a serious privation to any class of consumers to forego the consumption of the drug they use.

35. The use of all these drugs may be prohibited. They would not be consumed illicitly to any appreciable extent. The prohibition can be enforced by stopping the cultivation of the plant altogether and by making it penal for any private individual to do so as an article of trade. The prohibition would not cause serious discontent. It cannot create a political danger. It would not be followed by recourse to (a) alcoholic stimulants or (b) other drugs.

36. If the leisured classes get employments for their vacant hours (and the struggle for life is getting keener day by day to leave none an unoccupied hour now); if the poverty-stricken labouring people get enough to eat for strength to undergo the hard work without being under the necessity

of using their reserved force brought forth by a stimulant; if the criminal classes are to be checked from their acts of violence and terror; the use of the drug (ganja) may be prohibited without risking anything whatever. The religious mendicants really do not need it, and many of the mendicants are but the deep-dyed criminals in disguise. If the whole class is suppressed, society would not be the worse for it.

37. The effects of charas-smoking differ in degree from those resulting from ganja-smoking. Charas-smoking is stronger than ganja-smoking.

38. I cannot say.

39. I have not had sufficient experience.

40. Ganja and siddhi are used by the kabirajes as medicines in bowel complaints.

41. (a) (b) (c) No.

(d) Yes, medicinally otherwise than as a preventive of disease in malarious and unhealthy tracts, or a febrifuge. The fishermen, the boatmen, the dāk-runners, the palki-bearers and the sweepers consume ganja under the idea that it gives them staying-power under severe exertions or exposure, and alleviates fatigue. It is a mistaken idea. It simply deadens the feelings and sensibilities. While under its influence a man may bring into use all the strength in him without feeling bad till all his strength is drained away and he is left a complete wreck; just as a man with a paralysed hand (the sensibility only being affected) would handle a piece of live charcoal till the hand is charred and dead and useless, he never feeling at any moment what had been coming on. This is the case with the insufficiently fed poor hard-working men. Those who can afford to eat up to the standard may keep off the injurious effects of the drug for a time, but ultimately they do succumb as well. I refer to the habitual use of the drug.

43. Moderate consumers are inoffensive to their neighbours; but all the same they are ever dreaded and never trusted, for they may break into violence any moment by taking an extra dose. None are safe who have got a consumer in their midst. I say this of ganja and charas smoker especially.

44. As regards siddhi, a habitual consumer after a moderate dose feels refreshed and light; a slight intoxication may be produced. It allays hunger and fatigue; it creates appetite and cools the system. The effect lasts for about two hours. As regards ganja, in a habitual consumer it cheers up the system, creates appetite and removes fatigue. The effect lasts for an hour or two; the after-effects are very pronounced; the appetite is gone, insomnia is induced, the chest is affected, and the constitution breaks down completely. A man cannot eat nor sleep, and becomes a prey to all its concomitant evils. He is either a raving maniac or a religious idiot; the inmate of an asylum or a street beggar or the hermit of a cell.

45. (a) Yes; ganja and charas particularly. (b) Ganja impairs the constitution in more than one way. (c) Yes. (d) Yes. (e) Yes; a ganja-smoker is never a moral being. He or she is generally a debauchee. He is active as long as he lasts. (f) It does not deaden the intellect altogether. It produces insanity of a violent type, which generally has a religious element in it. It is often permanent. (g) A man takes to ganja-smoking not with a hope to obtain relief from mental anxieties, but for forgetting his physical wants when he is ill-fed and hard-worked, or for driving away the heaviness from an unoccupied

mind, or for stimulating the carnal desires when he has got more than enough to enjoy.

46. Excessive ganja-smoking would occasionally cause temporary insanity, a mania of homicidal character. A man would commit murder under its influence. The habitual excessive use completely ruins a man: his intellect is gone, his moral faculties are dead, and his constitution is a wreck. The effects of bhang-drinking on a man, who never had it before, are horrid. He never forgets them after he had experienced them once.

47 and 84. I do not think so.

49. Yes. It is so used by the prostitutes. Its use for this purpose is more injurious, or it has to be taken in less increasing doses to keep up the exciting effect till the excessive excitement ends in impotence as its just reaction.

50. The strong excitement due to the excessive use brings on the reaction sooner. With this view religious mendicants take to the use of the drug. They must need suppress their carnal desires.

51. A large proportion of bad characters are habitual moderate consumers of ganja and siddhi. Moderate use deadens the moral faculty. Excessive use excites the will-power to a high pitch, and a man may commit any act of daring while so excited.

54. Yes. These drugs have the peculiar property of helping abstraction and concentration of forces, both mental and physical. If a man wants to concentrate his mind to a special subject or wants to bring all his energies to bear upon the performance of a certain act, he smokes ganja. While under its influence he forgets everything else; all responsibilities gone, his conscience and reasoning powers are laid at rest. He acts with vigour as if not his own, for there is no dissipation of energies. I have had no instances. A gang of dacoits would consume their ganja before they start on their business. A man is bent upon taking revenge on his adversary; he is weak and timid; he smokes his ganja and is in a moment turned to a ferocious being.

56. I cannot say.

57. I know of no such cases.

62. It should be stopped as far as the Government is concerned. The people may cultivate a little for their private use or for medicinal purposes.

63. The cultivation of the plant or the sale of the articles should not be in the hands of the Government. No countenance whatever should be given to the use of the drug.

64. I asked a ganja-smoker why he did take to the use of it. He said because it was brought to him, otherwise he would never have sought it out.

68. There are shops licensed for the sale of these drugs. These shops should be closed.

69. Local opinion ought to be taken before a shop is opened; and if it is taken, I think there would be no occasion to open one in any locality, for the ganja-smokers are cowards and the public have no sympathy for them whatever.

Oral evidence.

Question 1.—I passed through the Medical College in 1883 with the degree of M. B. I have

served in the Central Provinces for four years; and after that in some six or eight districts in Bengal. I have never been attached to a lunatic asylum, nor had any special experience of insanity. I made special investigations after getting the Commission's questions; but four years previously at Raipur I had made special investigations into certain intoxicating drugs and made notes of them. I have not those notes by me; but I consulted them in framing my answers. My investigations four years ago were carried on in one opium shop only. It consisted in my examining the people I found there. Recently I sent for all the ganja-smokers of Chittagong. I have noted of eleven men, but I only actually saw four men who came up to me. I told my Hospital Assistant to invite the ganja-smokers to come to me, and I would give them some pice. The four men who came were all inveterate smokers. I have not mentioned any of their cases in my answer. One was an Arabic scholar; another was a Sanskrit scholar and a pandit; another a press compositor; and another a lunatic. These were the only four ganja-smokers of whom I made enquiries in Chittagong. I enquired the history of the lunatic from his mother. The Arabic scholar was also mad, going about the streets and catching people by the leg. The pandit went three times to jail. He was a pickpocket, and not in full possession of his senses, though not insane. The fourth, the compositor, is not mad. He is a moderate smoker. He was always being discharged from employment because he was useless. All these four persons admitted the use of ganja. There was a fifth man, a Muhammadan fakir. I recollect now that more than four men came to me, but I have not noted their names. There was a sixth man who came to me.

Question 33.—The description in this answer applies to every ganja-smoker, however little he may take. I have seen many ganja-smokers. Almost every one of the lower orders smokes ganja, and I have mentioned the classes to which they belong. Every ganja-smoker is potent for mischief, and may be up to anything; but he is not a wrecked man unless he goes to excess. In Chittagong I only found four ruined and wrecked men. My experience is confined to towns, and does not extend to the country. My experience is not among my friends or acquaintances, but connected with cases I have sought out. As a member of society, a moderate ganja-smoker is more dangerous than the inveterate smoker, because the latter has become powerless.

I had no prejudice about the drug. Some of my friends belonged to a temperance society and wished me to join, but I could not take pledges. I, however, entertained a strong opinion against the drugs from my boyhood. When I was a boy of twelve I used to see my superiors and relatives smoking ganja and charas. They smoked privately and that roused my dislike, because I knew they were doing wrong; but I did not see any of the pernicious effects in them.

Question 44.—By affection of the chest I mean bronchitis and asthma. Out of the four men I first mentioned, two had these complaints.

Question 46.—The latter part of my answer 46 is based on my own experience. The drug was once administered to me when I was 12 years of age. The effect was bad. On another occasion the drug was administered to me without my knowledge in a cake, and the effects were alluded

to in the answer. I did not drink it on the latter occasion. It is not my recollection of the bad effects which has made me avoid the drug. I avoid everything that is unpleasant to me, and I have no attraction for bhang.

Question 54.—The whole of this answer is hearsay. I have no experience of the criminal part

of the answer. The rest is based on the statements of the Chittagong ganja-smokers.

Question 55.—I have no experience about this. It is merely hearsay.

Question 64.—The ganja-smoker mentioned in this answer is the lunatic of the four Chittagong smokers first described.

129. *Evidence of Civil Hospital Assistant TRAILAKYANATH BANERJI, 24-Parganas.*

1. There are several ganja-smokers and siddhi-drinkers in my village and adjoining villages, so I got the opportunity of gaining some knowledge about them. Also on one or two occasions I saw some people smoking ganja at Bhawanipur, Calcutta.

2. Yes; ganja, siddhi, and charas respectively.

23. Ganja-smokers, in the absence of ganja, sometimes smoke siddhi in the subdivision of Basirhat. By lower-class people, about double the quantity of ganja at a time.

28. (a) Three chillums of ganja, costing about three pice. (b) Twelve chillums of ganja, costing about three annas.

29. (b) Sometimes dhatura, opium and tobacco are mixed with ganja for the purpose of more intoxication. Dhatura, spices as cloves, black pepper, cardamom, etc., and sugar are sometimes used with siddhi for the same purpose.

30. Ganja and bhang are not confined to the male sex, and even children become habituated to these drugs, though not very common.

31. Habit easily formed. It is difficult to break off. Moderate habituals of ganja soon become excessive.

32. Hindus on the fourth day of the Durga

Puja drink siddhi for religious purposes. This is done to please the goddess Durga, and it is necessary from a religious point of view and temporary. It is generally drunk temperately. It neither forms the habit nor is injurious in most cases.

41. (a) Siddhi in moderate use is digestive.

44. Immediate effect of the moderate use of ganja and bhang on the habitual consumers is slight intoxication and creates appetite. Intoxication lasts only for a short time. Slight depression is the after-effect. But no uneasiness is felt for the want of subsequent gratification.

46. Habitual excessive use of ganja weakens the constitution if proper food is not taken. Habitual excessive use of ganja and bhang produces insanity, and it is the exciting cause; but in some cases there is predisposing cause, as hereditary. Insanity produced by bhang is mania and temporary, and that by ganja is melancholia. The last type is also temporary, but liable to become permanent in a few cases. Symptoms may be re-induced by use of the drug after liberation from restraint. Insanes sometimes give history of ganja and bhang where there is no record of them.

47. Yes.

48. Habitual excessive use of ganja and bhang is hereditary habit.

130. *Evidence of Civil Hospital Assistant MEER KOOMAR ALLY, Municipal Dispensary, Cuttack.*

1. The information on which my answers are based owes to my experience as Civil Hospital Assistant for about twenty-seven years in the Cuttack District.

2. I have very little knowledge of charas, which is almost foreign to this part of the province. As regards the other two products, the terms most commonly used are siddhi, bhang, subzi or patti, and ganja; and their definitions, as given by Dr. Prain, may be accepted.

19. Ganja is used generally for smoking, but in exceptional cases when bhang is not available, consumers in this district have been seen using it in lieu of bhang after pounding it in a very small quantity with spices such as panmohori and pepper and mixing water with sugar.

As regards any other use to which ganja is put, the kabirajes or baidyas make it a component of madak or majum, and administer it in cases of dyspepsia, colic, rheumatism, loss of appetite and like diseases. I know of no places where the use of ganja for drink as bhang is prevalent.

23. I have never come across in my experience a person using bhang for smoking.

28. The average allowance and cost of bhang per diem to—(a) habitual moderate consumers is about a pice, (b) habitual excessive consumers is about 2 pice; while that of ganja to—(a) habitual moderate consumers is about a pice, (b) habitual excessive consumers is about two annas.

29. The following ingredients are ordinarily mixed with bhang by the different classes of consumers:—

(1) Pepper, (2) panmohori, (3) water, (4) sugar.

And the following exceptionally:—

(1) Kasni, (2) yellow substance of nageswar flower, (3) cardamom (small), (4) rose-water, (5) milk, in addition to the above.

As regards ganja only dry tobacco leaf is mixed and rubbed with it before smoking, and nothing else that I know of.

30. In solitude bhang or ganja is practised in

the ordinary way, but in company it generally comes to an excess to some extent. Bhang or ganja is generally confined to the male sex, but females sometimes use bhang and not ganja. Children are seldom found to use any of these two drugs except when it is given them in the shape of medicines by kabirajes.

31. The habit of consuming bhang or ganja is easily formed, but it is difficult on the part of the habitual excessive consumers to break off, though it is not the case with habitual moderate consumers. There is a tendency in the case of either of these two drugs for the moderate habit to develop into the excessive.

32. There is a religious custom amongst the Hindus, as far as my information goes, that offerings are made by them annually to certain gods of bhang prepared with the ingredients hereinbefore mentioned with the addition of ripe plantains, etc., of which they partake moderately, looking upon it as a holy thing; but it is not likely to lead to the formation of the habit.

36. There is no reason to think so.

37. The effects of ganja-smoking are stronger and more rapid in intoxication than those of bhang-drinking, which make a comparatively slow progress.

39. Ganja-smoking is injurious, but eating or drinking ganja is very rare as stated elsewhere.

40. Bhang and ganja are prescribed by kabirajes or baidyas on account of their medicinal properties. Bhang is, as far as I know, used in the treatment of cattle disease.

41. Moderate use of bhang or ganja may be beneficial in its effects—(a) as a food accessory or digestive, and improving appetite; (b) to give staying-power under severe exertions or exposure, or to alleviate fatigue; (c) as a febrifuge or preventive of disease in malarious and unhealthy tracts.

42. Moderate use of bhang is in my opinion harmless in curing dyspepsia, diarrhoea, etc.

44. The immediate effect of the moderate use of bhang and ganja is refreshing, intoxicating, sometimes allaying hunger and sometimes creating appetite. The effect on an habitual excessive consumer lasts for nearly an hour, on an habitual moderate consumer for nearly four hours, and on a beginner for nearly twenty-four hours. After the intoxication is over, the consumer feels lan-

guid. The want of subsequent gratification produces longing and uneasiness.

45. Habitual moderate use of ganja or bhang does not produce any noxious effects, physical, mental or moral, but such use of the former (ganja) impairs constitution some way or other. Habitual moderate use of ganja or bhang does not injure the digestion or cause loss of appetite; but such use of the former (ganja) has a tendency towards bronchitis and asthma, while such use of neither of the two drugs impairs moral sense or induces laziness or habits of immorality or debauchery as far as I know; nor does it deaden the intellect or produce insanity. I have had no opportunity of personally coming across such cases of insanity with which the connection of use of hemp was alleged.

46. The habitual excessive use of ganja produces noxious effects, physical, mental and moral. It injures the constitution, injures digestion, causes loss of appetite, brings on bronchitis and asthma, impairs the moral sense, induces laziness and habits of immorality. It deadens the intellect and has a common tendency towards producing insanity, but neither of these evils results from such use of bhang.

47 and 48. No, in the case of ganja or bhang it does not.

49. The moderate use of ganja and bhang is sometimes practised by kabirajes or baidyas as an aphrodisiac. It is seldom used by prostitutes. Its use for this purpose is not more injurious than its use as an ordinary narcotic, as it is used in the way of medicine. Moderate use of the hemp does not tend to produce impotence.

50. The excessive use of ganja and bhang is not practised as an aphrodisiac. It tends to produce impotence.

56. The admixture of tobacco with ganja, used in moderation or in excess, serves as an accessory, but that of spices, sugar, etc., as hereinbefore mentioned, with bhang, alleviates its dryness and renders it palatable and delicious. Dhatura and nuxvomica are mixed with bhang, not for personal consumption, but for administration to others with intent to commit crimes.

57. Ganja in the absence of bhang is, as hereinbefore mentioned, sometimes used by consumers in this district in lieu of the latter by being pounded and mixed with water and sugar, imparting stronger effects than bhang itself.

131. Evidence of BABU RAMES CHANDRA SIB, Overseer, Lunatic Asylum, Dacca.

Oral evidence.

I am Overseer of the Dacca Asylum. I have been six years Overseer. I was before that clerk of the asylum for eleven years. I now perform both duties. I have no medical training. There is a Hospital Assistant in subordinate medical charge.

The case book is the only register of patients received kept in the asylum. There is first a series of entries giving the name of the patient and certain details, including the disease and the cause. Then there are certain entries giving a history of the case before admission into the asylum. All these details and this abstract are entered by me in the register, except the name of the disease,

which is entered by the Superintendent. These entries which I make are copied or abstracted by me from the descriptive rolls received with the patients. I never make any entry differing from what is contained in the descriptive roll. So far as I remember, no alteration of any entry made by me has ever been made by any Superintendent. So far as I know, the Superintendent has always desired simply that my entries should accurately represent what is entered in the descriptive rolls. It is since 1880 that these entries have been made by me. Before that they were made by the Superintendent. But they were made by him in precisely the same way. He copied or abstracted the entries of the descriptive roll received with a patient. He did this on the admission of the

patient, or as soon after as was convenient. Since 1880 the work has been regularly done by me.

Then this same register contains below these entries the history of the patient in the asylum. This history is, as a rule, wholly written by the Superintendent.

The cause is entered in the register from the descriptive roll. The cause was not shown separately in the details at the top of the page until 1890, when I inserted a heading for the sake of convenience. Before 1890 it was shown always clearly in the first entry, copied or abstracted from the descriptive roll. When the descriptive roll showed the cause as "not known," but stated under the heading about intoxicants that the patient used ganja, the insanity was always shown in the asylum books as due to ganja.

Dr. French in 1880 gave me an order to do so, and this has been the procedure ever since. I have not referred the point to other Superintendents, but simply followed this procedure.

The only other kind of difference from the descriptive roll that I can recall to mind is when an entry of cause, which really means nothing (such as derangement of brain), is put down in the descriptive roll, I refer to the Superintendent as to what I should enter. He would in almost all cases tell me to enter "Not known."

These are the only cases in which the register differs from the descriptive roll as to cause, so far

as I remember. Cause is never entered in the register from enquiry made after the patient's admission. I know of no case of this being done. The entry made at the top of the page would never be altered. But if any enquiry which I might make showed cause not hitherto known, this fact would be entered in the history of the case. I remember such cases, and I might be able to point them out. But that entry in the history of the case would not alter the cause, as shown in Statement VII of the annual report. That statement is filled up only from the entries made in the descriptive roll as copied into our register. I would mention to the Superintendent that in conversation with the lunatic I had ascertained that he took ganja, or that he had asked me for ganja; and the Superintendent would enter that fact in the history of the case. Not even where the cause is left blank would any entry ever be made afterwards on that subject among the entries taken from the descriptive rolls. I know of no use to which the Superintendent would put the information I thus gave him, beyond the advantage of knowing more of the case. It would not be used in compiling Statement VII. I compile that statement, and have done so for seventeen years.

I have spoken to the friends of lunatics about the cause of insanity. But I do not think I have ever reported to the Superintendent anything told me by friends.

I have never kept friends for the Superintendent to see.

132. Evidence of BABU DURGA DASS LAHIRI, *Brahmin, Medical Practitioner, Rangpur.*

1. From persons using hemp drugs.
2. Locally known by the name of ganja and charas as well as bhang and siddhi.
3. Rajshahi, Bogra, Rangpur and Pabna. It is abundant in Rangpur.
4. Ganja and bhang. Bhang and ganja are of different species.
5. Not known.
6. Generally dense.
7. No cultivation.
- 10 to 12. Not known.
13. There is restriction for cultivation of ganja in this district. The other points of the question not answered.
14. (a), (b) and (c) No.
15. Not known.
16. People prepare bhang in their houses. It can be prepared from hemp plant grown anywhere. Ganja and charas cannot be prepared from the wild plant grown anywhere.
17. Not known.
18. Ganja, charas, and bhang deteriorate by keeping. They perfectly lose their effects in time. Keep good about two years, cause of deterioration being the destruction of resinous substances. The deterioration of the drugs can be prevented to some extent by keeping them hermetically sealed in some tin-lined boxes.
19. In this district ganja is used for smoking. Charas is not used here.

20. Generally low classes of people smoke the ganja here, viz., palki-bearers, coolies, fishermen, etc.

21. Flat and chur ganja are used here indiscriminately for smoking.

22. Charas not used, and hence there is no import here.

23. No.

24. Bhang is occasionally used as drink by the people here, especially by the up-country men.

25. The use of ganja is on the decrease owing to its increased prices.

26. Most of the ganja-smokers here fall under head (a), habitual moderate consumers.

27. Ganja is generally used by the low classes of people, who are subject to excessive toils and exposure.

28. From two to four pice worth ganja being taken by each individual here among the habitual moderate smokers.

29. Dried tobacco leaves are generally mixed with ganja by the ganja-smokers here. Dhatura is not used. Tobacco is mixed with ganja in order to remove its pungency, while bhang is drunk mixed with milk and sugar. Dhatura seed occasionally mixed with bhang drink. The preparation of bhang massala is not known here.

30. People generally smoke ganja in solitude. Its use is chiefly confined to the male sex. It is not used by the children here.

31. The habit of consuming ganja is easily formed. It is very difficult to break off the habit,

but not so difficult as opium with the opium-eaters. The moderate consumers may turn to excessive ones.

32. No custom, either social or religious, in regard to the consumption of the drugs in question here.

33. The people generally regard the ganja-smokers with some degree of hatred. There is no concern with the religion here. The ganja-smokers are generally of peevish and hot temperament, and so they are disliked by the people. No custom of worshipping hemp plant here.

34. It would certainly be a serious privation to habitual moderate or excessive ganja consumers to forego the use of the drug. They lose their energy and appetite. I have no idea of the probable numbers of each class.

35. It would not be feasible to prohibit at once the use of the drug. If it is prohibited, then ganja-smokers will resort to illicit dealings. A prohibition is not therefore desirable, as it will render a serious discontent among the consumers. No political danger is apprehended in discontinuing its use. The prohibition of the ganja-smoking is very likely to be followed by recourse to alcoholic stimulants or other narcotic drugs.

36. I do not think.

37. I have no knowledge of the charas-smoking.

38. No difference.

39. Smoking of the preparation of the hemp plant is more injurious than drinking the same in any of its forms, because the smokers generally possess the diseases of the lungs, as chronic catarrh, bronchitis and asthma.

40. Yes; bhang and ganja frequently used by the kabiraj for medical purposes. Yes; bhang is used for the diseases of the cattle.

41. The moderate use of bhang and ganja is beneficial to a certain extent: (a) as a digestive, (b) to alleviate fatigue and exposure, (c) as a preventive of diseases in malarious and unhealthy districts. (d) It is a powerful aphrodisiac. The drug is generally used by the low classes of people, such as palki-bearers, Domes, Chamars, etc. I refer the above to habitual moderate consumers. Higher classes of people occasionally use the drug for its aphrodisiac effect.

42. The moderate use of the drug is beneficial to health to a certain extent.

43. Yes.

44. The immediate effect is to exhilarate the nervous system. It is refreshing to some extent. It produces intoxication. It does not allay hunger; on the contrary, it increases the appetite. The effect lasts from two to twelve hours according to the dose and the nature of its preparation, and according to constitution of the persons using

the drugs, the after-effects of the drug being general depression. Yes; uneasiness and longing of the drug is felt if not subsequently used in time.

45. (a) to (e) No. I have not seen any evil result mentioned when taken moderately, but it is very difficult to keep the moderation.

46. All the faculties, mental, physical and moral, are impaired by the excessive use of the ganja-smoking.

47 and 48. No.

49. Ganja is used as an aphrodisiac occasionally in moderate doses. Not used by the prostitutes as an aphrodisiac. Not injurious for this aphrodisiac purpose.

50. The excessive use of the drug produces impotency and other injurious effects.

51. Habitual moderate ganja consumers are not bad characters. Moderate consumers do not generally commit any crime while under its influence.

52. The excessive use of the drug generally leads to the commission of crime or any other social violence.

53. I have no experience of the occasion of any particular case.

54. No.

55. It may occur, but I have no personal knowledge of any particular case.

56. The effects of hemp plants used in moderation or in excess are modified by the admixture of other substances. Dhatura is occasionally mixed to increase the narcotic effect of the drug bhang.

57. I have no knowledge of the use of the drugs in eating or drinking.

58. So far I am aware, the present system of excise administration is working well.

60. No cultivation here.

61. No production of charas here.

62. No cultivation of hemp plant for the production of bhang here.

65. Bhang and charas are not used, and hence not imported. The present taxation on the ganja seems to be excessive.

66. Yes.

67. Yes; the present system of taxation on ganja seems objectionable.

68. Yes; there are shops licensed for the sale here, and they should continue to exist for the convenience of the public.

69. Wishes of the people are consulted before any shop is opened in any particular locality.

70. I have no knowledge under this head.

133. Evidence of REV. D. MORISON, M.B., C.M., M.D., *Medical Missionary, Rampur Boalia.*

1. I have lived for about fifteen years in Rampur Boalia, and have had occasion to give the matter some attention medically, socially and morally. I am acquainted with the medicinal properties of the drug, and have observed its effects physically and morally on some natives in whom I am interested as head of this mission.

2. The plant known to us in Rajshahi is the dried flowering tops, flattened, of the *Cannabis sativa*, and I am informed that no other kind of

ganja is sold in the shops, nor are the people in the habit of using any other form of the drug, except in exceptional and extreme cases, when the leaves and stems of the wild plant are used as a substitute for the cultivated plant. The cultivated plant is so cheap, so conveniently obtained, and so much superior in its intoxicating qualities, that the wild plant, with risk of detection and heavy fine and its disagreeable after-effects, is almost never resorted to, except in desperate cases, when

it is impossible to get the other and more agreeable plant.

The definitions of flat and round ganja are not known here; only the flat ganja is used. I am not quite certain as to broken ganja or chur.

3. In Rajshahi. It is abundant in Rajshahi if allowed to grow after being sown.

4. It is known as ganja, siddhi and bhang in this district.

5. The soil and climate of Rajshahi are peculiarly favourable for its growth from the fact that it grows every year in my compound, and has to be cut down as offensive jungle; but it was first sown there by my syce, who used the drugs.

6. It grows densely, and seems self-propagating and rapid in its growth.

7. Yes. (a) For ganja chiefly. I cannot answer for the others. In the extreme north-east of the district the cultivation is under the Government Excise Department.

8. I cannot say.

9. I know nothing practically of its cultivation.

10. I have been informed that there is a special class of men with hereditary experience handed down from father to son. Personally I cannot say whether this is true or not.

11. I am not aware, but I should think in this climate and soil it would be possible to bring the wild plant into domestication.

12. I have no special knowledge of this.

13. It is. To a plot, as I said, in the north-east of the district. Cannot answer the others.

14. (a) Ganja.

North-east of Rajshahi.

15. I have only noticed the flat licit ganja smoked here.

16. (a) Cannot say. (b) Certainly: it is a mere infusion with spices, milk, etc., added. (c) I should think so with care and cultivation.

17. Can't say; but Hindus use it chiefly.

18. Can't say definitely. The tinctures prepared in England seem to have lost some of the properties of the freshly prepared ganja from the physiological effects being somewhat milder and less marked. I presume the cause of deterioration will be found in the effects of damp and air modifying its chemical constituents.

19. I only know of ganja as used here for smoking. I know of no other use.

20. The ganja-smokers are chiefly from the labouring classes, day-labourers, cartmen, bricklayers, carpenters, blacksmiths, fishermen, milkmen, raiyats, and devotees. I took a rough census of a neighbouring village within municipal bounds, and found 60 per cent. given to the smoking of ganja. They are mostly day-labourers, cartmen, and raiyats. This percentage is high, and would not be found so high in any village outside municipal bounds.

21. Flat, I am told.

22. Not used in this town, as far as I know.

23. It is, by those who cannot afford to get the ganja; but to a limited extent.

24. I am of opinion that it is not much used here, except for smoking purposes; but on certain occasions Hindus use it.

25. I believe the use of ganja for smoking is on the increase. The mode of smoking in companies

attracts young lads to hear the stories, and they taste the pipe and easily form the habit. Liquor enhanced has led a few to seek stimulation by ganja as the cheaper form of intoxication.

26. For ganja I estimate that—

50 per cent. are moderate consumers.

30 per cent. are excessive consumers.

20 per cent. are occasional consumers.

I do not think you can divide them into four classes.

27. From the labouring classes mainly.

(1) Example. (2) Cheapness of drug. (3) Facility for obtaining it without inconvenience; shops near. (4) Its fascination when once indulged in.

28. Ganja.

(a) Habitual moderate taking two smokes a day, 5 to 6 pice in company. Perhaps 2 to 4 pice would cover the share of one of the company.

(b) Habitual excessive, 2 to 4 annas per day. "Excess" means using it every two hours.

29. Don't know that anything is mixed with it except tobacco when smoked.

30. Always in company, unless the man has means. It is too expensive to smoke alone. A smoker to get a satisfactory whiff must use more than he can take; and if he can't take it all, the remainder is lost, so when two or three are together they have satisfaction and economy. I was more than surprised to find that even boys from 10 to 15 years club together and buy ganja to smoke. Boys carrying bricks and mortar for brick-layers I found doing so.

31. (a) Yes; as easy as tobacco-smoking.

(b) Yes; but only discomfort and craving follow, with pain and disinclination for food for four or five days.

(c) Always a tendency for the moderate to become the excessive smoker.

32. I am informed that there are such customs of using bhang at the close of the Durga Puja holidays among the Hindus; but I have no personal knowledge of this.

33. With opprobrium. Yes; the names ganjari and ganjakhori are considered as disgraceful when applied to any one. I attribute the sentiment to the complete and well-understood demoralization which takes place in the character of the smoker. He is unreliable and liable to frequent bad company. I am not aware that it is worshipped; but there are hundreds of "slokes" which describe the charms and merits of the drug—(1) as giving pleasing and exalted visions; (2) as an aphrodisiac; (3) as a stimulator of muscular energy; (4) as giving courage and mental concentration, tending again to irritability and mania when deprived of it or taken constantly to excess.

34. I do not think so. It is a vice, and only a vice. Many would be benefited, but no one would suffer if it were stopped to-morrow.

35. Ganja could be prohibited to the class who take it most now, by simply doubling the price. I mean the labouring class. This would mean 90 per cent. of the consumers in this town. The other 10 per cent. are among the well-to-do

classes. Illicit cultivation can easily be kept down by a small reward, as it is a large bulky plant and not easily concealed. No discontent among consumers if it were done gradually and warning given beforehand. Yes; I believe there would be some who would take to liquor if it were cheap enough.

First try the effect of enhancing the price; then, if necessary, let prohibition follow, except for medicinal purposes. In my opinion enhancement would put it beyond the reach of the class who consume most.

36. No; its price has rather induced some to try ganja as the cheaper form of intoxication. A man accustomed to intoxication will in desperation fly to any nerve stimulant that he can get, whether liquor, ganja or opium. It is the hunger of the nervous system for its accustomed stimulation.

37. I cannot say; it is not used here to any great extent. Indeed not at all, if I am correctly informed.

38. Only the flat kind is used here for smoking.

39. Smoking, I think, is the most injurious form of taking the drug, for the following reasons:—

(1) It is immediately brought into contact with the blood, and speedily passes into the circulation which supplies the brain and nervous system; (2) its active ingredients are volatile, and thus are readily carried to the lungs by the smoke; (3) by the stomach the process is slower and less certain, as we find by using the tincture in medical treatment. It is probably modified by the secretions of the stomach before entering the circulation. At any rate it is not so active by the stomach as by the lungs. The smoker does not smoke ganja as an European would smoke a pipe. He inhales it into his lungs, and lets it pass out by his nostrils slowly, thus bringing the smoke into contact with the blood circulating in the capillaries of the lung. The blood takes up oxygen in the same way from the air breathed.

40. I have never heard of ganja being used by the kabiraj. It is mentioned in the Hindu pharmacopœia, and in various forms enters into the composition of some medicines used for diarrhoea and indigestion; but I think it is rarely so used now. I am not aware that it is ever given to cattle in this district.

41. The moderate use of ganja is not beneficial in any way whatever—

(a) It over-stimulates the appetite, causing the smoker to gorge himself with food which he cannot digest, and thus leading to indigestion.

(b) It does give staying-power, but the reaction is severe. It demands the stimulant again or the smoker is quite helpless and useless.

(c) It is never used as a febrifuge; indeed, if a ganja-smoker has an attack of fever, he dare not indulge in his usual pipe, as it aggravates his condition. The ganja-smoker is as liable to fever as others. It has no prophylactic power in malarious districts.

42. I do not consider the smoking of ganja harmless even in moderation.

43. As a rule they are inoffensive enough, but liable to sudden and uncontrollable fits of temper, which in the chronic excessive smoker makes him a quarrelsome and unprincipled neighbour.

44. The first effect on the novice is to produce pleasing and exalted visions and fancies. It

stimulates the sexual desires, and produces intoxication of a garrulous, hilarious kind.

It always increases the appetite as stated above, and no man will fly to a drug to increase his appetite when hungry. The effects last two hours according to the dose. Usually after two hours the sensations wear off, but a slight effect is felt even up to three hours. Yes; the after-effects are weakness, lassitude, disinclination to move, and an uncomfortable restless feeling internally, difficult to describe, due, I presume, to the craving of the nervous system for the wanted stimulation.

45. It impairs the physical organism, saps the muscular energy by over-stimulation, and leads to loss of muscular vigour, producing emaciation. It produces severe constipation, which causes indigestion and impairment of the alimentary functions. The constipation leads to dysentery by retention of fæces in the bowel. In old smokers asthma and bronchitis are common, especially asthma.

It utterly demoralises a young lad. The sexual desires are so stimulated that, if he can afford it, he will spend his days and nights with prostitutes. Laziness follows the over-stimulation of muscular and sexual functions. I question much, if taken in moderation, that it speedily leads to insanity. I have only seen one case of insanity said to be brought on through its use, and I was not at all convinced that the insanity was produced by the use of the drug. I think it requires great excess to produce insanity, but on unstable brains probably any intoxicant would produce insanity. There are many brains that cannot bear excess of stimulation without showing symptoms of derangement. I am not prepared to say how far this may account for the high percentage of insanity in asylums in India attributed to ganja. I know that those who have gone wrong or are considered mad from ganja in this town are simply "sots" who are always under its influence, but I have seen no violent deeds done by such. I am informed that a lunatic in the Rajshahi jail is there for murdering a ganja shopkeeper at Nator who refused to supply him with ganja.

46. My deliberate opinion is, after giving the matter considerable attention, that the insanity produced by the drug has been overstated. The irritability of temper produced by the want of it is a fact; and that it gives a fearless courage—a courage that does not see the dangers or results of the course of action followed—is also, I think, fairly established. I can quite understand that a naturally unstable brain under such stimulation might suddenly develop into acute mania of a homicidal nature. I am, however, of opinion that sufficient discriminating attention has not been given to this matter (such as the insanity produced by excessive indulgence of the sexual desires produced by the stimulation of ganja) by Indian physicians who have opportunities of studying the matter in lunatic asylums. I am also informed that if the drug is kept from the subject, the maniacal symptoms pass off and he regains his reason. I do not think people suffering from mental or brain disease take to ganja to allay their sufferings. I rather look upon it as the natural proportion of weak-brained humanity, who have, like others, taken to ganja from the influence of example. As the habit spreads, the proportion of insane will be found, I believe, to bear a close relationship to the proportion of unstable or weak brains in the community from which the ganja khor or smoker comes. It is of course true that deficient self-control in a smoker leads him

to go to excess more speedily than the man with vigorous intellect and possessed of self-control. The weaker will yield first in all such cases, and is less liable to recover himself. I am convinced that ganja weakens the will-power, making the man liable to be influenced by others from without; and, if so, more liable to be influenced from within in moments of anger or under provocation or delusion.

47. No; not hereditary, nor does it affect offspring to any appreciable degree.

48. I know it leads to neglect of the family claims, rendering a man callous to natural affection; but this is owing to the commanding nature of the craving for the drug.

49. (a) It is by young men.

(b) Yes; prostitutes take it, but drink or imported liquor is fast supplanting it in this respect.

(c) It leads to over-stimulation of the sexual function.

(d) It produces impotence in man as a natural result of over-stimulation.

50. In excess it ultimately obliterates the sexual desire, and makes the subject indifferent to every desire, mental or physical. To produce this condition is the object of the Hindu devotee when he indulges to excess. He becomes oblivious of all desire, set free from all worldly or temporal attractions, and all mental desires. The mind, they say, is thus put into the divine attitude of neutrality or equilibrium, poised between desire and non-desire.

51. Ganja-smoking demoralises the smoker and slackens his moral fibre; but although they are untrustworthy, still I do not find them largely as a class given to crime. I would class them next to opium-smokers in this respect. The tendency is to make them reckless, and in times of great scarcity or under temptation the ganja-smoker would yield to temptation before the ordinary non-smoker. It does not incite to crime directly, but the ranks of crime would be more easily recruited from ganja-smokers than from those who are not demoralised by its use.

52. The smoker who uses the drug to excess will ruin his home by selling off his goats, cows, and effects rather than do without it. He thus becomes its slave, and may be induced by the craving to steal to supply his wants.

53. I have instanced under question 45 a case which occurred in this district.

54. I am told that that is the general impression among the people.

55. I cannot say.

Yes; deep coma follows a strong draught of an infusion of ganja, but I have never heard of it being used alone for criminal purposes.

56. Answered previously as to effects. I am not aware of dhatura being used with it.

57. No experience of this.

58. Not practically acquainted with this branch of Excise administration. Popularly the impression is that there might be greater care exercised in preventing illicit ganja from being sold to the public secretly.

59. I cannot go into this question here.

60. I have no practical knowledge of this.

61. Not used in Rajshahi as far as I know.

62. Not much used in this district. The plant is easily controlled by offering a small reward for information of private cultivation.

63. Yes; to retail shops for ganja.

(1) There are 405 shops in Rampur Boalia for the retail sale of ganja for a population of twenty thousand. Two shops would be ample. (2) The drug is too cheap; a lad may buy one pice worth, and get a taste of the drug sufficient to produce intoxication. (3) It should not be sold to lads under twenty years. I know boys of ten to fifteen who club together to buy ganja for smoking. It is a shame that they should have the temptation thrust upon them by retail shop-keepers, who will gladly supply the drug to mere children. (4) Increase the price, say double what it is, and you will reduce the number of smokers by 90 per cent. This would put it beyond the reach of the labouring man, who is the largest consumer.

64. No experience of this.

65. Taxation of ganja is not sufficient when one remembers the minute quantity which produces intoxication. One pice worth to a beginner is sufficient to intoxicate. The same applies to alcoholic liquors; they are too cheap and thrust too much into the face of the public by the multiplicity of shops.

66. I only know the one kind of flat ganja. Its price certainly should be raised to save the morals of the rising generation.

67. It is too cheaply sold (ganja), and the tax should be doubled, as stated above.

68. Yes; four or five. Reduce them by half or one-third. Two shops would be ample.

69. Never. I cannot say. I suppose the ganja farmer chooses his ground and takes up the most promising site for his shop. Local public opinion would close every ganja, opium and liquor shop in Rajshahi.

70. Untaxed ganja is procurable in this district; from whom and to what extent I am unable to say.

NOTE.—The wild ganja plant, of which so much is made as a substitute for ganja proper, is a large closely-growing fibrous plant, easily seen and known by everybody.

It is not used for the following reasons:—

(1) It is too mild to gratify the habitual smoker. (2) It produces intense headache and leaves disagreeable symptoms which the cultivated ganja is free from. (3) The severe penalty inflicted on those who are found with it in their possession or have it growing on their ground, deters even those who might take it from using it.

If ganja were suppressed entirely, there would be no difficulty in preventing secret cultivation by a small reward offered for information. It does not grow wild like jungle; it must be sown like other plants from seed or cuttings. It grows round my stable, but was sown there by grains of seed falling from the syce's hand who used the drug.

134. *Evidence of PYARI SANKAR DASS GUPTA, Baidya, Medical Practitioner,
Secretary, Bogra Medical Society, Bogra.*

1. I am a medical practitioner, and have personally observed cases of ganja intoxication.
2. These varieties, as defined here, are accepted in this province also. (1) Bhang, (2) charas and (3) ganja are generally the names of the respective articles in this province.
3. I have seen in Jessore and Bogra the plant growing spontaneously. It is abundant in the eastern part of Bogra.
4. Bhang, siddhi, bijaya, are the names applied to the same plant.
5. It grows in sandy alluvial soil in winter.
6. It grows densely.
7. It is cultivated in Rajshahi, Bogra and Dinajpur districts.
 - (a) For ganja.
 - (b) Charas comes out during the process of preparation; but it is not the object of the cultivation.
 - (c) Bhang is not cultivated.
 - (d) No.
8. The area has been increased for the increased demand, as I am told.
9. First a plot of land is made ready for sowing seeds, and when the plants grow one foot long, they are transplanted to another piece of land most carefully cultivated, free from weeds and manured with cow-dung and oil-cakes. They are planted about a yard's distance.
10. They are the ordinary cultivators and do not form any special caste.
11. No.
12. Not to my knowledge.
13. The following are the ganja-producing districts:—Bogra, Rajshahi, Dinajpur.
14. (a) Ganja is prepared in those ganja-producing districts above mentioned.
 - (b) There is no provision for preparing charas which is prepared during the process of ganja preparation.
 - (c) Bhang is not prepared here in an extensive scale.
15. When the cultivated plants are full-blown, they are reaped, and pressed for seven or eight days. Then the pressure is removed and the flowering tops are trodden under feet and dried in the sun for three or four days. This is flat ganja. When it is rolled under foot it is called the round ganja. When parts are detached during the process of preparation, they are called chur. Ganja is principally used in smoking. The tops are separated from the seeds, then moistened in water, the water is squeezed out, and wrapped with tobacco leaves, and pressed on the left palm by the right finger, and then cut into small fragments, and pressed again and again, cut three times.
 - (A) Then it is smoked in an earthen kalke, a funnel-shaped tubular apparatus, and in hukas especially used for the purpose.
 - (B) I do not know any method of eating it.
 - (C) It is drunk with bhang.
16. Bhang is dried and preserved by the people at their own houses. The leaves are mixed with black pepper and moistened in water, and then pressed in a mortar and reduced to a thick consistence, and then mixed with sugar and water and drunk like a sherbet (syrup).
17. There is no special class, but the drugs are prepared by ordinary cultivators.
18. Ganja deteriorates in the course of time. Bhang also has the same law. Excessive dryness is unfavourable to it. Ganja is burnt every year from the Government stock.
19. Ganja is mainly used for smoking. So is charas. Ganja is used also in conjunction with bhang and drunk like a syrup. Ganja is smoked in Bengal and Behar; but bhang used as a sherbet mentioned above in many villages of these provinces.
20. Lower-class Hindus and Muhammadans use ganja for smoking. But higher classes also smoke it. Ganja is used more than bhang and charas. Charas is a refined habit of the town debauchee. Sanyasis, bairagis, and fakirs smoke ganja. The number of them smoking ganja far surpasses any other class.
21. Flat ganja is generally preferred.
22. Charas is imported from Native States, Nepal.
23. Bhang is not generally smoked, and, when smoked, it is not much intoxicating. It is not much used.
24. People who have not means to procure wine or ganja, or have some religious prejudices to the former, eat and drink bhang. Those who were formerly addicted to wine or ganja, but have left them owing to disease or poverty, use this. It is used in many villages, and among higher classes. Uriyas and up-country men use it more than the Bengalis.
25. Use of ganja is on its increase owing to the abolition of the outstill system in Jessore, and in other places for the increase of the price of alcohol.
26. It is difficult to give accurate figures for want of statistics. It may be stated in round numbers as follows:—
 - (a) 70 per cent.
 - (b) 20 per cent.
 - (c) 5 per cent.
 - (d) 5 per cent.
27. (a) Lower-class Hindus, Muhammadans, up-country men, sanyasis, bairagis, and fakirs. These are indolent, of violent temperament, unsociable, and unfit for any higher function of life.
 - (b) Many of the above classes, corrupt young men of higher classes, and badmashes of all religious sects. The ascetics are indolent and live on alms, and the other classes are wrong-doers and criminals.
 - (c) and (d) Drunkards and opium eaters in company, and children of the classes mentioned above. They have no control over their actions, and so more dangerous.

28. (a) One pice to one anna.

(b) I have known men, sanyasis, taking 20 tolas a day, spending Rs3 for it. The minimum is two annas a day.

29. Dhatura seeds are sometimes known as an adulterant of ganja, but used only on rare occasions.

30. These drugs are generally preferred to be taken in company. Sanyasis take them with Uttar Sadhaks, or disciples. Some smoke in solitude for devotion. Females of lowest classes, prostitutes and abandoned women, smoke it also. Children of ganja-smokers, of singing parties, those in bad company smoke ganja. Bhang is also taken by them with their elders.

31. The habit is contracted easily. Three days' smoking produces the habit. Once formed, it is difficult to break off the habit. Like other intoxicating drugs, taking a little leads to take more.

32. Bhang is used in Bijaya Dasami. The name Bijaya is suggestive. During Lakshmi Puja and Sivaratri fasting, etc. These are the drowning the images of Durga, worship of the goddess of fortune, and the fasting day said to be observed by the great Mahadeva.

Ganja is used in excessive quantities during Charak Puja, taking place on the last day of the Bengali year. It is the worship of Siva joined by lower-class men, who generally form the principal factors of the puja. It is by no means essential, for we do not use them on any occasion.

33. Ganja-smokers and bhang-drinkers are generally looked upon with hatred. Educated public opinion hates them. There is no religious or social check. The ganja-khors are generally hated. It is for their bad character that they are so much hated. He is generally rude, violent in temperament, lacking in all his duties, a bad son, undutiful father, cruel husband, a troublesome neighbour, and a bad citizen. He is a liar. If any one speaks in a varnished language, it is said to be a "ganja-khori galpa."

I do not know any custom of worshipping the hemp plant. The Mahanirban Tantra says, "Modyam mansam tatha matsyam mudra maituna mabacha."

Wine, flesh, fish, fried peas and women are mentioned as essentials of Sakti Puja, but nowhere the hemp drug is used as such.

34. It may be considered a little hard, but the difficulty is not insurmountable. There is no probability of any disease. Of the class (a) and (b) 50 per cent. will be much inconvenienced. Of the (c) and (d) it will not be very hard. The sanyasis will take it much to heart, as they are, as a class, invariably addicted to the vice.

35. It is perfectly feasible to prohibit these. There may be probability of the drug being illicitly consumed. To prevent consumption the tax may be increased and the methods suggested in the last chapter may be adopted. The prohibition will give rise to no political danger; for the ganja-smokers have very little influence over society. The Government has faced questions of a greater religious character, as the Sati or the Age of Consent Act, with boldness; this is comparatively a minor question, affecting only depraved men. Prohibition will not increase alcoholism, but it may give rise to bhang intoxication.

36. Rather alcohol is being substituted by these drugs owing to the greater price of the former.

37. The effects of charas are milder.

38. Flat ganja is preferred, being more effective.

39. Smoking bhang is less injurious than taking it internally, as the smoke, being more volatile, loses its effect soon; while the drug taken by the stomach has its influence in full over the constitution.

40. Bhang is used by kibirajes as medicine. It is also used in homœopathy as *Cannabis sativa*. It is also used in cattle diseases. Ganja is used in European medicine as tincture and extract of *Cannabis indica*; but its effects are confined to a small group of diseases. I do not know the use of charas as medicine.

41. Even moderate use of these articles is not beneficial.

(a) It first produces ravenous appetite appeased by no food. Subsequently it impairs appetite. It has no power of digestion like alcohol, nor is, like it, a part of food. The diarrhoea and dysentery produced by it shows that it is rather the opposite of digestive.

(b) It alleviates fatigue, and gives staying-power under exertion; but many drugs less injurious have also the same power, as tobacco or tea.

(c) It has no power of preventing fever, or any febrifuge power, as people taking it are equally its victims.

(d) Sanyasis allege that their object of using it is to acclimatise them to every climate and to inure them to bear the inclemency of weather.

I have seen it stated that ganja is useful during famine and distress, as it acts the part of food and makes up for its deficiency. But I cannot believe that such a statement was ever seriously made. Voracious appetite produced by its use is not economy, nor does it give staying-power under starvation. Among ganja-smokers those are known to keep good health who take milk and other nutritious articles of diet. But men living on sparing diet soon die of bloody dysentery, asthma or phthisis. So its economic or health-keeping power is unauthenticated.

42. It is neither harmless. (1) It is not a necessity to the system, and nature does not tolerate any abuse; so what is unnecessary must be injurious. (2) It is expensive. People are generally half-starved, and even one pice a day is not a trifling sum for many families. (3) Moderate habit cannot be kept. (4) Even moderate smoking is injurious.

43. Even moderate smokers get intoxicated, and their rude behaviour makes them repulsive to their neighbours.

44. It produces a pleasing sensation, rapid succession of pleasing ideas, talkativeness and merriment. It produces a ravenous sensation not appeased by food. Its effects last five or six hours; often a whole day. Its after-effects are a headache, a sensation as of the brain boiling over, and lifting the cranial arch like the lid of a tea-kettle. It requires a fresh chillum to revive the spirit.

45. Its moderate habitual use is also attended with baneful results. It undoubtedly produces injurious results to the constitution; even strong men are pulled down by its continual use. A lean, haggard, rude face, with eyes red and in the socket, a bony frame, indicate a ganja-smoker. It first produces increased appetite, not satisfied by any

food; and its long-continued use, loss of appetite. Ganja-smokers generally die of bloody dysentery, asthma and phthisis, and hæmoptysis, &c. Ringer says: "Indulged in for a long time, it produces loss of strength, trembling and much mental weakness." Of all the ganja-smokers that I have seen, I have not seen any moral or religious man taking intelligent interest in any good subject. It produces insanity, generally mania. Delusions of senses, a sort of dual consciousness, give succession to unsound mind. Healthy boys have been attacked after a debauch, and restored to health on discontinuing it. I have also seen a menial spending his last pie in the ganja shop.

46. Excessive smokers generally ruin their health sooner, hastening their death or soon getting into a state of *non compos mentis*, and become inmates of lunatic asylums, whose statistics will amply show the truth of the assertion.

47 and 48. I think in that case association has more to do than heredity. But the fact is certain that sons of ganja-smokers become also smokers. The ganja-smoker often urges his son to bring fire for it or assist him in smoking, and the child is thus initiated in the vice.

49. Ganja is an aphrodisiac. It is also used by prostitutes and adulterers. It is more injurious when used in that capacity. It is generally seen that persons who use artificial aphrodisiacs are generally barren. It is generally the case with aphrodisiacs that they subsequently impair sexual power and produce impotence. The rule is not otherwise with ganja.

50. Persons using ganja as aphrodisiac subsequently increase the dose, and excessive smoking, in addition to its ordinary effects, injures the sexual powers also sooner and more effectually.

51. Nearly all bad characters are ganja-smokers. To harden one's self to a career of vice, to deaden conscience, and to produce boldness in the face of danger, persons take to ganja-smoking. There is no crime which ganja cannot assist. Thieves, robbers and adulterers are nearly all ganja smokers.

52. Bad characters at first commence with moderate quantities. But as they grow in vice, they also become immoderate, as they require a greater quantity to drown their conscientious scruples.

53. I have recently read of a criminal alleging as his plea that he was under intoxication by ganja-smoking. Other cases of this kind have also been heard.

54. Most badmashes smoke ganja before performing their premeditated acts of crime. It stimulates their powers, gives them energy for action, deadens their conscience, and makes them reckless. Robbers, after committing their crimes, enjoy themselves in a party to forget the pangs of conscience.

55. Cases have been heard that bad characters in railways or inns form acquaintance with their victims and induce them to partake sweetmeats, and, when perfectly insensible, they rob them of all their properties. These drugs produce complete stupefaction and have been administered to produce sleep.

56. Dhatura seeds give greater power of intoxication, and excessive adulteration of it has produced temporary insanity.

57. Ganja is often drunk in connection with bhang. I have not known any such use of charas. When a person habitually takes bhang, his crav-

ings are never satisfied by the drug alone, and he admixtures it with ganja. In that case the intoxication is still more powerful.

58. It is capable of improvement. Greater barrier should be placed before people, so that it cannot be smuggled or easily secured and procurable by children and bad characters.

59. At present one man is allowed to buy twenty tolas, but it should be restricted to five tolas. There is no restriction about age. It should be a rule that no one below sixteen years or so should be allowed to buy ganja from the shop. Insanes and hardened criminals, who use ganja to assist them to commit crimes, should not be allowed to buy ganja from the shop. Opinion of the majority of the residents should be taken before establishing a ganja shop to any locality. If the authorities keep greater eye towards its prevention than the profit hereby obtained, I think the abuses may be successfully checked. The tax on ganja should be enhanced.

60. At present there is much possibility of smuggling. Cultivators of ganja may make illicit sale of it. There should be greater supervision to prevent such abuses.

61. Charas is not produced here.

62. There should be a restriction about the cultivation of bhang plants. If the Government orders special men to destroy all wild plants and keep the cultivation of them under its own men, as in the case of ganja, it may be prevented from abuse. It may cost some trouble, but it will amply repay.

63. As regards charas and bhang, I have no knowledge; but about ganja, the quantity should be restricted to five tolas a man, and the tax on it should be increased, so that it may not be available to all classes owing to greater price.

65. The price of ganja is much less in proportion to alcohol and other intoxicants. But it should be raised, for nothing checks these habits so successfully as to place it beyond the reach of the people.

66. There are different rates for the different varieties, as I am told. The price should be proportionately raised.

67. No.

68. I am told there are houses appended to each ganja shop for smoking there. But such places, if they at all exist, for I am not exactly sure, are highly dangerous. They are potent for mischief, and the seat of all conspiracy for crime. It should be a law that no one should be allowed to keep such a place appended to his shop; no one should be allowed to smoke in the premises of the shop.

69. The wishes are not consulted, and no measures taken, so far as I know. I think local opinion should be taken more fully than (if taken) at present, and that opinion should be from those who are the true representatives of the country.

70. There being no Native States, I am not able to answer this question.

Oral evidence.

Question 1.—I studied in the Calcutta Medical College and got my degree in 1880. I was never in Government service. Our medical society in Bogra numbers ten members. I settled in Bogra one year after getting my degree and have been there ever since. I have never studied insanity specially.

Question 28.—A sanyasi came to Bogra last winter who used to smoke all day long. I was told he smoked all day long, and that he took 2 or 3 rupees worth, which I understood to represent about 20 tolas. He had chelas with him who smoked in smaller quantity. This is the only case I have seen of a man consuming as much as 20 tolas a day. I know another man who smoked every hour, but I cannot say what quantity he smoked. The sanyasi was always in bad temper, and his eyes were red; but the consumption of 20 tolas had not damaged his health, which was stout and strong. He ate but a small quantity of food.

Question 43.—If a man loses the even tenor of his temper I consider him intoxicated. A man loses his understanding to some extent when intoxicated. Moderate smokers become intoxicated in this manner. I have seen men lose their temper after smoking their usual quantity. Intoxication consists in a man's brain becoming congested and his losing the balance of his mind. I have seen moderate smokers become intoxicated from their usual dose, perhaps because they had empty stomachs or were not in good health. This intoxication is not analogous to alcoholic intoxication, but of a different kind. My answer 44 describes a certain degree of this intoxication.

Question 44.—My answer 44 describes the ordinary effects of the drug even in a moderate dose. I found this statement in books I have read, and I have also asked smokers.

Question 45.—The moderate use does not produce insanity. The words "delusions of senses, a sort of dual consciousness, give succession to unsound mind," come from Ringer's or Hughes' Therapeutics. I have never observed these effects myself.

I had to treat a boy whose insanity was caused by ganja-smoking. He was under my treatment for three or four months. He was nineteen years old. I know another case of a beggar who got his insanity from ganja-smoking. Whatever he got by begging he spent in the ganja shop, instead of buying food. I did not know the beggar before he became insane.

The boy was a student at the Bogra school. I knew him then, and he was in sound mind. He left school and fell into the company of de-

bauchees, who were bad characters of immoral life. They drank occasionally, but smoked ganja principally. I never heard that the boy drank. I knew the boy's family, and there was no hereditary taint. I knew his father and uncle, but not his grandfather. I asked the uncle if any of the family had been insane, and he said none. I did not enquire particularly about the grandfather. The mother is living, and I have not enquired about her family. The boy was insane for one and a half years. He did not go to an asylum. For some months before the case came to me, the boy was under the treatment of kabi-rajases. He was under my treatment only during the last three months of his insanity. The boy took my medicines, and after some days came without showing any symptoms of insanity. I gave him sedatives. He was not epileptic.

I read a *Materia Medica* by Dr. Durga Das Kar, written in Bengali, in which it is stated that Dr. Simpson had taken a census of the Dacca Lunatic Asylum in 1862, and found that 48 per cent. of the lunatics were addicted to ganja. This was what led me to think that ganja produced insanity, and my opinion was confirmed by the case I have described.

Question 51.—I have been an Honorary Magistrate for seven or eight years, but in that capacity I have not seen any cause to connect ganja with crime. Many of my neighbours smoked ganja and committed crimes. Many of the observations in answers 51 to 55 are mere hearsay, and I made enquiries from villagers who told me there were ganja-smokers in their villages who were also bad characters. I don't remember that any of my neighbours who committed crimes went to jail. I mean such crimes as abusing others and extorting money from others and going to beat them. I only know of one man who extorted money, and he lived in the same "para" as myself in Jessore when I was a child. Some of my neighbours in Bogra may have committed crimes, but I know no particular person who has committed a crime.

I am member of a temperance association. The medical society of Bogra is not a temperance society. The temperance association to which I belong is that founded by Keshub Chunder Sen, and called the Band of Hope. I am pledged against all intoxicants.

135. *Evidence of KAILAS CHUNDRA BOSE, Kayasth, Medical Practitioner, Calcutta.*

1. By directly communicating with people who have extensive knowledge of the subject and who are personally acquainted with the process of hemp-growing in Bengal, Central Provinces, Rajputana and Nepal, I could get opportunities of collecting facts regarding the subject.

2. Dr. Prain's definitions may be accepted for our province.

Siddhi, bhang, subji, pati, buty, thandi, bijaya.

Ganja is sometimes called *kara tamock* (strong tobacco) by the lower-class people of Bengal.

Charas has got no other name.

7. (a) Yes.

(b) No.

(c) Yes.

(d) Yes.

Eastern Bengal. Extensive cultivation of ganja and bhang made under the supervision of Government. The cultivation of hemp for fibre is carried on at Reshra, Lakimpur, and Malda; but the result is quite unsatisfactory.

8. The consumption of hemp drug has increased, and consequently there has been an increase in the area of its cultivation. Poverty brought on by the consumption of alcohol has driven many a hard drinker to moderate the ration of alcohol and to take recourse to ganja and bhang as chief ingredients for intoxication.

9. February and March is the time when the cultivators prepare their soil. The land is then ploughed for several times and all weeds are carefully taken out; it is then manured, the best manure being human excreta and the cow-dung. After the rains have fairly set in, the land is again

ploughed. Ridges are now made over the land and the seed is sown in July and August; the seedlings are planted on the ridges. When the plants flower, experts go round the field and remove the staminate plants. Ganja will now form and will be ready in January and beginning of February.

10. No; they don't form a special class; they are of the same class as other agricultural cultivators.

11 and 12. No.

13. (a) Yes, the cultivation is restricted to the districts of Rajshahi on account of their soil.

(b) No.

14. (a) Yes, ganja grows extensively in Nao-gaon in the district of Rajshahi and in Sultanpur station, Northern Bengal Railway. Charas is never extracted in this province; it comes from Nepal.

Bhang is cultivated to a large extent in Bhagalpur, Patna, Monghyr, Sahibganj. Calcutta market is supplied from the products of these places. It also grows abundantly in the districts of Rajputana, where no duty is levied on the product.

16. It is not generally prepared by the people in their houses. Yes; bhang could be prepared from the hemp plant wherever grown. No; ganja and charas require some special process; besides, wild ganja is unfit for human consumption.

17. Ganja is prepared by the middle-class Bengalis who are agriculturists and who live in the Rajshahi district. Bhang is commonly prepared by the middle-class Hindustanis and the Chowbes of Muttra. It is sometimes, though very rarely, prepared by malis. Charas is made by the Nepalese and the people of Amritsar.

18. Yes, they do. Bhang and ganja keep well for twelve months only, after which they are supposed to lose their intoxicating virtues. Government never allows the shop-keepers to retain ganja for more than two years. Damp and moisture destroy the resinous matter. There is nothing to prevent deterioration.

19. Yes; ganja and charas are only used for smoking, but there is only a nominal percentage of men who chew ganja and swallow it with the help of water. Instances of this rare variety of ganja consumers can be seen amongst the inferior class of Marwaris living in Barabazar.

20. Ganja is smoked by the Hindus and Muhammadans. Moreover, Chowbes, Bengali Babus, sadhus and fakirs smoke it; women of disreputable character are also ganja-smokers. Charas is used in very small quantity and by a limited number of men. Out of 100, 95 would be ganja-smokers and 5 would be charas-smokers.

21. Round ganja is generally prepared by the people of this province.

22. Charas is only supplied from Nepal, and the people of this province prefer it. Amritsar charas is consumed by the people of Amritsar.

23. No.

24. Marwaris, Johuris or people who deal in precious stones, Chowbes, most of whom are employed as jamadars in mercantile firms, Sikhs, Bikanir men, jogis, and sanyasis drink bhang to excess. Bengalis and Muhammadans do not indulge in it. Cent. per cent. of the Johuris and Chowbes take it, and 30 per cent. of the Marwaris are known to take it. In Barabazar.

25. They are decidedly on the increase. Cheapness is their best recommendation.

27. Apart from the poorer class of people who use ganja and bhang for their cheapness, there are thousands of respectable men who are addicted to these drugs only because they are not disallowed by the Shastras or religious scriptures. Johuris teach their children to practise bhang from their infancy.

28. (a) One pice to four annas.

(b) Eight annas to two rupees.

29. All classes of ganja-smokers use the same ingredients, tobacco leaves and little water, whilst the charas-smokers use only prepared tobacco. Of those who indulge in bhang, the poorer class use a small quantity of black pepper only; whilst the well-to-do class of consumers use sugar, rose-leaves, aniseed, seeds of cucumber, black pepper, almonds, cloves, cardamom. Bhang massala— aniseeds, rose petals, cucumber seeds, seeds of musk melons, almonds and sugar-candy.

30. Amongst the people of Rajputana and North-Western Provinces bhang is publicly used, whilst ganja and charas are, by the majority of people, practised in solitude. Children of tender years, say, ten or twelve, are known to drink bhang very greatly and they belong to the rich class of Marwaris or Johuris. I have seen a grandfather pouring a teaspoonful of prepared siddhi into the mouth of his infant grandchild who was barely twelve months old.

31. (a) Yes.

(b) No.

(c) There is no such tendency.

32. There is a custom prevalent amongst the people of this province to drink siddhi on the last day of the Durga Pooja. The use is considered essential. It is always temperate. It never leads to the formation of a habit.

33. Bhang-drinking is never taken into account by the people of this province. Ganja and charas smokers are always looked down upon by higher-class gentlemen. There is no such custom prevalent in this province which would require people to worship the hemp plant.

34. It would undoubtedly be a privation to the labouring class of consumers who, to while away the fatigue of their work, indulge in ganja or bhang. The kahars or water-carriers and domestic servants, who form nearly one-eighth of the total number of inhabitants of Calcutta, will suffer materially if they are constrained to forego the habit of ganja-smoking or bhang-drinking.

35. It would not be feasible; certainly it would be consumed illicitly as it is now to a certain extent used. It would be impracticable to enforce prohibition. It would occasion discontent among the low class of consumers. Prohibition, if enforced, might lead to political danger. Yes; the consumers would have recourse to alcoholic stimulants and other intoxicating drugs.

36. No.

37. In fact there is no difference between the effects of ganja and charas smoking, but some of the consumers say that the effect of charas is more lasting than the effect of ganja. Charas acts more speedily than ganja.

38. The charas and round varieties of ganja are superior to the flat ones, and their effects are more powerful.

39. Ganja-smoking would be less injurious than ganja-eating. In smoking the drug, the greater portion of the resinous matter is destroyed by burning, and the resinous matter is injurious to human constitution. The intoxicating power

of the drug depends on the quantity and quality of its resinous matter.

40. Bhang is often used by the kabirajes and hakims in the treatment of chronic diarrhoea and dysentery; it is also used in dyspepsia. *Kamashwar modak*, *Gangadhar churna*, are made from the dried leaves of fresh siddhi. Bhang is considered as a powerful stomachic tonic and astringent.

Ganja boiled in mustard oil forms an application for scabies and itches.

41. Yes; in small doses. Bhang in small doses acts as digestive. Ganja-smokers say that it does alleviate fatigue. Extract of ganja sometimes acts as antiperiodic and febrifuge.

42. I cannot call it harmless, but its moderate use is not more injurious than tobacco-smoking.

43. Yes; they are.

44. It acts as a stimulant. Yes; the consumers say that it is refreshing. It does produce intoxication. It does not allay hunger. It does create appetite; its effects do not last longer than six hours. Unlike alcohol it does not produce any uneasiness.

45. (a) No, I have never seen it produce.

(b) No.

(c) No; on the other hand it promotes appetite.

(d) No; on the contrary it relieves dysentery, bronchitis and asthma.

(e) No.

No, it does not. In my practice amongst people who use bhang or ganja, I have never met with a single case where ganja or bhang was the cause of insanity. There were a few cases of insanity amongst my patients who were habitual ganja-smokers, but on close investigation it was known that ganja was not the direct cause of their mental derangement, for they had other constitutional vices which might as well derange the functions of the brain. Besides, in two or three cases there was a family history. It was only very recently a case of insanity was brought to me for treatment, and the friends attributed that the derangement was due to ganja-smoking, a habit he contracted from his frequent association with the religious mendicants; but minute history revealed that some twelve years ago he suffered from insanity and when there was no history of ganja-smoking or bhang-drinking.

47. No.

49. Yes; men and women of questionable morality use it as an aphrodisiac. Its use is in no way more injurious than the use of the other drug. Hemp never produces impotence.

51. Instances are absolutely wanting to establish connection between hemp and crime. The badmashes of Mirzapur, who devote most of their time in gambling, and pick a quarrel with innocent people, are habitual bhang-drinkers and charas and ganja smokers. But they do not use the drug for any special purpose. They use it as a social necessity, just as tobacco used by the Bengali Babus.

52. Living examples can be had of men using ganja of two rupees worth daily for forty or fifty years and retaining their faculties in perfect order. Some of these men belong to the high-class gentlemen commanding respect in society.

54. No; never. These drugs are not even reputed to possess such power.

55. Yes; sometimes such attempts have been made by criminals. Large quantities are necessary to produce complete stupefaction, but total stupefaction can never be produced by hemp drugs.

56. Admixture of tobacco is supposed to increase the intoxicating properties of the drugs; but virtually it does not. Sugar, when added to bhang, increases its potency, but this statement of the bhang and ganja consumers requires verification.

57. I have not come across a case where charas has been eaten by the badmashes. Ganja is chewed by the persons addicted to its use. A mere nominal percentage of Mirzapur and Benares men eat ganja.

58. As far as Bengal is concerned, excise administration does not require any further improvement.

60. From facts collected from persons who deal in ganja and who grow it and could venture to say that further modification is wholly unnecessary.

62. It would be useless to attempt at such a thing. Any further restriction would induce men to grow hemp clandestinely and smuggling would continue.

63. No, not the slightest.

64. No.

65. Yes, it is quite reasonable with reference to the hemp drugs, but alcohol will still bear further taxation. Trade in alcohol should be restricted for the safety of the people. Free use of alcohol would simply encourage crime and offences.

66 and 67. No.

68. Yes; there are houses in our city, where people resort to consume bhang, charas, and ganja. Such houses are often kept by the juvenile consumers who find it difficult to practise smoking or drinking in their own homes. These houses are dangerous, but there is nothing to do away with them. When shops opened out publicly, the authorities do not consult the wishes and opinions of the people living in the neighbourhood. It would always be wise to consult the opinion of the neighbours.

70. People of Rajputana, Nepal, Amritsar and Central Provinces sometimes bring hemp drugs for their domestic consumption, but they do not sell them to the people of this province. They don't pay the duty.

Oral evidence.

Question 1.—I passed out of the University with the degree of L. M. S. in 1874. I was in the Government service for five years. My father died, and there was no one to look after my family; so I resigned the Government service. I resigned in order that I might have the disposal of my own time. I never made the subject of insanity a special study, nor have I been in charge of a lunatic asylum. Criminals supposed to be insane were taken to the cells in the Campbell Medical School and I had the duty of observing them. I have seen about thirty cases of insanity in my practice. These are cases on which I have closely attended. Some of these are referred to in answer to Question 45.

Question 8.—My statement that the consumption of the hemp drugs is on the increase is not based upon statistics. I have stated the impression gathered in my practice from observing that for the last four or five years I have several times been called in to attend juvenile members of

respectable Marwari families, among whom I have a large practice. I am not sure of the fact; if the statistics do not support it, my impression is probably mistaken. I have attended one hundred cases of the kind I have described. They are cases of poisoning by bhang and ganja, and are common only during the Holi festival. Of late ■ practice has grown up of taking a mixture of bhang and ganja and other drugs, of which I am pretty sure from certain symptoms that dhatura is one. One patient only has told me that he had used dhatura, but I have observed dhatura symptoms in many of the cases. I cannot be positive that in any single one of the cases the symptoms were solely referable to the toxic effects of ganja or bhang. None of the cases formed the subject of any police enquiry. The drugs I understood to have been taken voluntarily for intoxication, and in no case were the effects fatal. None of these cases was ■ case of insanity. Some were cases of intoxication, and the longest duration of any case of intoxication was thirty-six hours.

Question 46.—My answer to this question is embodied in my answer to Question 45. I have no experience of the effects of excess except what is stated in this place. My experience is not to any large extent what I have gathered in my practice, but rather what I have learnt from smokers.

Question 51.—I mean that in quarters *e* and *g* of Bara Bazar, assaults and petty offences of violence are extremely common, and that I have failed altogether to discover that the hemp drugs had any connection with them. The “badmashes of Mirzapur” are people who have come down from

the North-Western Provinces and taken up their quarters in this part of the city of Calcutta.

Question 52.—It is not an exaggerated statement that living examples can be seen of men taking Rs. 2 worth of ganja daily. They are sadhus and sanyasis, and people take pleasure in treating them liberally when they come down to Calcutta. I know several of these men who have consumed as much as Rs. 2 a day. Last year I made enquiries of a sadhu in connection with a case of alleged insanity that had occurred in a man who was said to have learnt the habit from him. The sadhu told me that he had been taking ganja for the last forty or fifty years, ever since he was a child, and that he could take as much as Rs. 2 or Rs. 3 worth a day. I know four cases among respectable people, Marwari gentlemen, one of whom told me that each of them spent Rs. 2 a day on hemp. I cannot say that they used this amount themselves, but the information was given to me by one of the members who has supplied me with a good deal of the information contained in my paper.

Question 68.—The houses I refer to are private places where the young men meet every day. Each frequenter has to contribute to the expenses of the house. They are in fact clubs for ganja-smoking. I know one shop on the side of the Chitpur Road where the keeper invites juveniles to come and smoke without charging them anything, so as to teach them the habit. The shop almost faces Bartala Street. This is a licensed shop. There may be other shops in the Chitpur Road, but the above description will identify the one of which I am speaking. My information is based on the statements of respectable persons whom I entirely believe.

136. Evidence of MOHIM CHUNDER ROY, BRAHMIN, *Medical Practitioner, Nator, Rajshahi.*

1. My long residence in Rajshahi, the best hemp-drugs-producing district in Bengal, and the opportunities I have had, as a medical practitioner, to mix with the various sections of the community.

2. Round ganja is unknown in this district. The other preparations are locally known as ganja (flat and chur), charas and bhang.

19. So far as I know, ganja and charas are used only for smoking.

23. Bhang, as ■ rule, is never used for smoking.

28. (a) From 2 to 4 pice per diem.

(b) From 2 to 4 annas per diem.

29. Ganja and charas are ordinarily prepared with tobacco for smoking. Bhang is usually prepared with black pepper for either eating or drinking purposes. Coriander, cinnamon, cloves and rose petals are also sometimes used in the preparation of bhang. Occasionally the preparation is sweetened with milk and sugar. I have not heard of opium or dhatura, etc., being ever mixed with either of these drugs. Bhang massala is sold in the North-West, not in Bengal.

30. With rare exceptions bhang is generally consumed in solitude, but the contrary is often the case with ganja and charas. Excepting prostitutes, females rarely make use of any of these drugs, and such also is the case with children. I do not know of their use being confined to any particular time of life.

31. It is my belief that the habit of consuming ganja and charas is easily formed, and that it is

difficult to break off. Both in case of ganja and charas the moderate often develops into the excessive habit.

32. Many people use bhang during some of the festive occasions, such as Dasara, Holi, etc.; but this is entirely a social custom and has no connection whatever with any religion. The use of the drug ((bhang)) in connection with such custom is not essential, nor does it lead to the formation of the habit. Ganja and charas, so far as I know, are never so used. Some section of religious ascetics consider the use of ganja to be an essential part of their religion.

36. I do not know, nor have ever heard of alcohol being used as a substitute for any of these drugs.

37. Charas is far stronger than ganja, and its effect is comparatively far more deleterious. Bhang is milder; and its use, though habitually indulged in, does less injury than either of the two others.

39. Bhang, as previously stated, is used for eating or drinking alone. But ganja and charas are never so used. Should any of these two be used for eating or drinking, the effect would be more lasting and therefore more injurious. Ganja and charas are both strong excitants of the brain; and their habitual use, keeping, as it would, that organ in a permanent state of irritation, not unfrequently leads to insanity. I have not seen any case of insanity resulting from the use of bhang.

40. Bhang is used by the native physicians (kabirajes) in several of their medicines, but ganja and charas are never so used. Bhang also forms an ingredient in some of the medicines used in the treatment of cattle.

41. (a) The moderate use of one or other of these drugs may excite cravings for food, especially sweets, which, if satisfied unchecked, often bring on indigestion.

(b) They give staying-power, etc., to those only who are habituated to their use.

(c) I do not believe they act as febrifuge or preventive of disease in malarious or unhealthy tracts.

42. I consider moderate use of any of these drugs (excepting perhaps bhang) to be harmful, inasmuch as moderate use often ultimately culminates into excessive use.

44. The immediate effect of moderate use on habitual consumers is intoxication. It may be refreshing. It does not allay, but on the contrary creates, appetite, which, in my opinion, is spurious and unnatural. Effect usually lasts from three to four hours. The after-effect is more or less depression. I do not think want of subsequent gratification produces any longing or uneasiness in moderate consumers.

45. I do not think habitual moderate use of bhang produces any noxious effect, physical, mental or moral. But this cannot be said of either ganja or charas, the moderate use of either of which may often develop into the excessive. Unless so developed, the moderate use of ganja or charas does not appear to exert any material influence on the constitution or injure digestion, etc. Insanity often results from excessive and not from moderate use, and where such is the case, hemp

drugs appear to me to be the exciting and not the predisposing cause. The insanity is not always of the same type and is often temporary and may be re-induced by the use of the drug.

46. I have known of several cases where persons became insane through excessive use of ganja. In fact, excessive use of either ganja or charas may lead to all the evils enumerated in the previous question.

47. The habit, in many cases, is certainly hereditary; and when children take to the habit, the effect undoubtedly is injurious.

48. The habit of excessive use is also sometimes hereditary. There is tendency in a son to imitate his father in this as in other matters; and when this does occur, the effect is really dangerous. I have known cases where children have been so infected.

49. Not unfrequently hemp drugs are used by men as aphrodisiacs. Prostitutes use them with a view to deaden their conscience and forget the miserable state of their existence. I cannot say when its use is more injurious—I mean whether as an aphrodisiac or narcotic. I have not seen moderate use leading to impotence.

50. Excessive use of hemp, it appears to me, is more a depressant than otherwise to the sexual organs. It is for its narcotic quality alone that it is so used. Sexual impotence invariably results from abuse of these drugs. By the word hemp I mean ganja, bhang and charas.

In conclusion, I have no further information to supply. My personal opinion on the matter in question is that since it would not be feasible perhaps to suppress them entirely, Government should adopt some such measure as would prove an effectual check to the excessive use of these drugs.

137. Evidence of KEDARESWAR ACHARJYA, Brahmin, Medical Practitioner, Rampur Boalia.

1. I know several of my relatives who habitually smoke ganja; one of them lives with me even now. Besides, I had lot of servants who were so accustomed. During the course of my professional business also I have come across with men who habitually smoke ganja; I know men, partly well-to-do in circumstances, who are veteran ganja-smokers, being addicted to the habit for a quarter of a century or so.

2. I think these definitions may be accepted. There is a popular belief that bhang is derived from a different species of plant from hemp (*Cannabis sativa*). The fact that in this part of the country bhang grows wild while ganja is a cultivated plant, lends colour to this belief. It is, however, erroneous. Locally the articles are known as ganja, charas and bhang.

19. In this part of the country ganja and charas are used only for smoking. In Orissa, I have known Pandas of Jagannath drink a draught of ganja, preparing it like bhang. It is rubbed up in a mortar with some spices and the potion is drunk off.

23. Bhang is smoked by ganja-smokers only on the contingency of ganja not being available. It is, however, so much despised as an article for smoking that weak ganja is condemned as bhang. Generally speaking, however, bhang is not smoked.

28. (a) Average allowance is two chillums—i.e., about 30 grains—daily, and cost about half an anna.

(b) Average allowance is about 12 chillums—i.e., about 1 tola,—and cost about 6 annas. I am personally acquainted with one who used to smoke one chhatak of ganja daily.

29. The only ingredient ordinarily mixed with ganja is tobacco leaf. A chillum of ganja is prepared thus: a bit of ganja is taken in the palm of the left hand, moistened with a little water and then rubbed against the palm with the right thumb; the water is then squeezed out and the bolus is mixed with finely-cut tobacco leaves and rubbed again as before. The mixed mass is then cut into small pieces, when it becomes ready for smoking. Before putting the mass into the kalika (the earthenware portion of a hukka which holds the tobacco), a small quantity of prepared tobacco is placed at the bottom, and over that the ganja mass prepared as before. Tobacco is mixed with the object of making the ganja soft and mellow. As to exceptional ingredients, I know of only opium; it is mixed with ganja by those who are opium-eaters as well, and with the object of heightening the effect of the ganja. Charas is mixed with a little tobacco, and prepared as ganja.

I know the preparation known as "bhang massala." Its ordinary ingredients are cucumber seeds, aniseed, poppy seeds, black pepper and rose petals. There is a richer variety which consists of, in addition to these, liquorice, sweet almonds, cardamom and saffron.

30. Ganja is generally smoked in solitude; ganja-smokers are looked down in society and hence the desire to smoke it privately. As a rule no invitation is made to join in smoking, but should one or more persons happen to come at the time, they sit together and smoke. Novices, who care more for privacy, select a solitary place where they meet at an appointed hour and smoke. Well-to-do ganja-smokers generally have some hangers-on who smoke with them. I have also known poor ganja-smokers doing sundry gratuitous services to a rich consumer for being allowed to smoke with him. Sometimes bhang is drunk in company. Generally the habit is confined to the male sex, but very many women of ill-fame do smoke. Ganja-smoking is scarcely taken to before arriving at the age of 20 years or so.

31. The first experience of a ganja-smoker is not always pleasant; it excites a form of delirium and hallucinations, usually followed by deep sleep. But of course this varies with the constitution of the individual and the quantity of smoke drawn in. Very many opium-eaters prefer an excuse for contracting the habit, but ganja-smokers generally make none. Youngsters learn through the force of example of their seniors; and notwithstanding the first unpleasant experience, they repeat smoking, and, during the course of a month, become habitual smokers. The habit once formed is certainly difficult to break off; it requires mental fortitude and determination in a high degree to do so. Moderate consumers can break off the habit without much bodily discomfort. I have known moderate consumers of scanty means doing without it for days together. Of course they suffer some uneasiness, *viz.*, disinclination to take any food, puffiness of the abdomen, chilliness, running from the nose, aching of limbs, and a sense of general malaise. The case of excessive consumers is different. Every habitual consumer must go through a stage of bodily discomfort before being able to give up the habit. But I think habitually excessive inebriation generates a loss of mental strength with which the degree of determination necessary is incompatible. This is the source of weakness, and hence the difficulty. It appears to me, however, that it is not so difficult to break it off as that of opium. These remarks apply to ganja and charas. Bhang is not habitually drunk in this part of the country, and so I have little information to give about it. There is a decided tendency in the case of ganja for the moderate habit to develop into the excessive. A habitual smoker cannot resist the temptation of a smoke when available. People with long purse almost always run to excess. But I have known poor men (a few of my palki-bearers of Bagdi caste) who have been smoking for a long time, but with whom the habit is generally a well-regulated one.

32. There is a semi-religious custom with regard to the use of bhang. It is drunk on Dasera and Lakshi-purnima days. Ganja is also offered to Mahadeva on the Sivaratri day. But the custom is certainly not regarded as essential, and it is not likely to lead to the formation of the habit or prove injurious.

36. Amongst the low-caste people I do not know whether alcohol is supplanting ganja; but I

know this, that many ganja-smokers drink country liquor as well. Amongst the Bhadrak class ganja always leads a small number of votaries; and that number, I think, has diminished still further; there are more persons addicted to drinking liquor than to smoking ganja. I think the reason is partly cheapness of liquor and partly because it is easily get-at-able. But the principal reason appears to me to be the fashion of the day.

37. The effect of ganja and charas smoking are alike in kind, but they differ in degree. There is, however, another difference, and that is, that the intoxication of ganja is immediate, while that of charas takes time to develop; further, ganja intoxication reaches its acme soon and then begins to decline, while that of charas gradually increases and lasts longer. Charas is stronger than ganja and produces all its effects, but in a higher degree. In bhang intoxication there is some sort of dryness of tongue and throat, redness of eyes, sudden startings, hallucinations, loss of sense of time and space and so forth, as that in ganja intoxication, but the effects last a very long time. Bhang is undoubtedly milder than ganja; all habitual ganja consumers, whom I have questioned, uniformly say that they derive no inebriation by smoking it. The difference in effect between the two appears to me to be partly due to the fact that while the one is smoked and consequently its action is rapid, and the other is drunk and consequently its action is slow.

40. Kavirajes prescribe old bhang fried in ghee and mixed generally with carminatives, in cases of chronic diarrhoea and dysentery. The use, however, is mainly confined to this class of disease only, but occasionally used as a nervine tonic. In diarrhoea of cattle bhang is given.

41 and 42. Neither ganja, charas nor bhang is a food accessory; neither of them has any virtue to appease hunger. On the contrary, ganja and bhang intoxication alike creates a desire for food, and people when so intoxicated eat more than they do otherwise; both are digestive to a certain extent. Moderate use of ganja or bhang doubtless gives a staying-power in works of extraordinary physical exertion, such as those of palki-bearers and blacksmiths. These two classes of people, as a rule, smoke ganja, and evidently they derive some help in carrying on their trade. Ganja and bhang appear to exert some influence—a preventive of malarial fever. Ganja-smokers appear to be less liable to malarial attacks than other people. Sanyasis say that ganja-smoking protects them from the evil effects of bad water. This appears to be significant. As a febrifuge, I know one instance in which bhang stopped an attack of tertian ague which formerly resisted treatment.

44. The immediate effect of moderate use on a habitual consumer is refreshing; he feels an inexpressible ease and takes to work with a cheerful heart. It does not give him intoxication but only some warmth. This effect lasts for a few hours, and there are some after-effects, *viz.*, a sense of laziness and loss of energy and spirit. At the habitual hour it must be smoked again, which of course varies in frequency in the case of different individuals. There is certainly a longing for gratification when the effect is over. Ganja-smoker is loath to do anything when his intoxication is over, but give him hope of a smoke and he will be up again. I know a gentleman who sings well, but would not do so, however pressed, until he has had a pull.

45 and 46. All persons are not similarly affected by ganja; hence even a moderate use produces different effects in different individuals, and, further, moderate use varies as to quantity according to the idiosyncracies of individuals. If indulged in for a long time, it more or less perverts the functions of the brain, upon which its effects are most marked. There is one characteristic with ganja-smokers very commonly observed, and that is their easily excitable temper. A ganzil (ganja-smoker) is almost synonymous with hot-headedness. I know many instances of improper acts done by persons under the influence of ganja; subsequently, when sober, they regret having done what they did. As to physical deterioration, while I have seen numbers of ganja-smokers who have grown thin and emaciated with a peculiar cachectic look about them, I have also seen many who have maintained plumpness of their body and limbs after years of habit. The latter class of cases are generally found among well-to-do classes. The difference appears to me to be due to abundant wholesome food and good living which tend to combat the evil effects of the drug. A ganja-smoker badly needs some fatty food, such as ghee, milk, etc. In the case of poor persons,—and ganja counts legions of such persons as its votaries,—the evil effects are in full swing. As to its effect on digestion, a similar divergence is observed. I think this fact is to be explained by constitutional peculiarities. The processes of digestion appear to be less altered by *cannabis* than by opium, but a ganja-smoker cannot eat anything unless he whips appetite by smoke. Thus he requires an artificial stimulus which evidently betrays some impairment of the function. Those ganja-smokers, who cannot command abundant wholesome food, suffer from dysentery, but it is difficult to determine how far it is due to ganja or to improper or inordinate food. As to asthma, although I have not seen any typical case originating from ganja-smoking, I know that a chronic catarrhal condition of the air passages with a certain amount of spasm is the misfortune of many old ganja-smokers. I know a friend of mine who suffered from chronic bronchitis in whom asthmatic fits were induced as often as he attempted to smoke ganja. During my enquiries, I have been very credibly informed of one case where a habitual ganja-smoker got an attack of asthma which subsided on breaking off the habit and reappeared on resuming it. As to impairment of moral sense, I have a decided opinion. I think moral sense in a high degree is inconsistent with a life of intoxication. A ganja-smoker's sense of duty is very capricious; as long as he has not had his *mowtat* (habitual dose of ganja) he is a touchy fellow, and when up, he is wayward. If he is the headman of the family, woe to the members if the *mowtat* is for some reason delayed. I do not think a moderate use of ganja induces laziness provided the smoker is well-fed. I know many servants, palki-bearers,

black-smiths, etc., who perform laborious works although addicted to ganja-smoking. I do not know any special habits of immorality of the ganja-smokers.

The question of ganja-smoking inducing debauchery will be discussed in the answer to question No. 49.

The foregoing remarks apply to cases of moderate use of ganja. I do not think moderate use of ganja has any tendency to induce insanity; it is, I think, only the habitual excessive use which induces it. I am sorry I have not much information to place before the Commission in the precise way in which the question is put as to insanity. I have not yet had under my immediate care any case of insanity induced by ganja-smoking. I have, of course, heard of many cases of insanity induced by ganja, but I do not think it proper to place unsifted material before the Commission. I have heard the story of a case, which appears to me a typical case of ganja insanity, and I place the story on record simply because I think the case to be a typical one. Bhairaba Nath Sanyal of Puthia, District Rajshahi, now deceased, became insane through the effects of ganja-smoking; when insane he was kept under restraint and he got better; when liberated, he again took to ganja-smoking and his insanity reappeared. This process of cure and relapse happened several times, and every time the fit of insanity was preceded by excessive ganja-smoking. During one of those fits he happened to be at Bilmaria, District Rajshahi, where he killed a boy by a lathi-blow. He was prosecuted but was let off on the ground of insanity. I am sorry my other engagements prevent me from making enquiries and obtaining fuller information about the case. I humbly request our worthy Collector to institute enquiries about this case to test its validity if he should think necessary.

47 and 48. I do not think so. I have seen the children of a veteran ganja-smoker of thirty years' standing, who some years back used to smoke so much as one chhatak of ganja, and they appeared to me quite healthy.

49 and 50. Ganja is popularly regarded as an aphrodisiac; beginners try to give a sexual direction to the mental disturbance; veteran excessive smokers, however, do not feel any enhancement of the carnal desire on account of the smoke. Indeed, the influence of ganja as an aphrodisiac is doubtful. Prostitutes do not use the drug for this purpose; they use probably to sustain them through their debauchery. The use of hemp, so far as I am aware, does not tend to produce impotence. I know many ganja-smokers who have got children. Habitual excessive use of the drug tends to impair sexual desire, although not to the extent of impotency.

138. *Evidence of* MOHES CHUNDER GHOSE, G.M.C.B., *Kayasth, Medical Practitioner, Ramnagar, 24-Parganas.*

1. There are several persons addicted to the habitual use of ganja and charas in my village, and my knowledge of the effects of these drugs is based on the effects produced on them. Bhang is used by many persons, and I have some personal experience of its effects on myself.

2. Ganja, charas, and bhang or siddhi are the three names by which the different preparations

from hemp are known amongst the natives in this part of the country.

19. So far as I am aware, ganja and charas are only smoked and never drunk.

23. I am not aware of bhang being ever used for smoking.

28. I have never made any enquiry on this

head, and it would be wrong to enquire now to be enabled to answer this question.

29. I have been told that confirmed habitual smokers of ganja and charas sometimes mix other substances with them to enhance their effects, but what these adjuncts are I have never made it a point to enquire. I am not aware of any preparation as bhang massala being sold in the bazaar.

30. As far as is known to me, the habitual smokers would like better if they get companions to join them in the smoke. The male sex from manhood upwards are generally addicted to the habit, but females are not exceptions. It is not usual for children to contract the habit.

31. The habit is easily contracted and difficult to break off. Moderation may and does often lead to excess.

32. There is a usual practice amongst Hindus of drinking a watery solution of smashed siddhi on the closing day of Durga Puja. The custom is more social than religious, and having been in vogue from time immemorial is regarded as essential. The upper classes, especially those who have the puja in their house, make it a point to smash some siddhi, dissolve the smashed mass in water, sweeten it with sugar, and flavour it with cardamom or other carminatives, and a pot of the mixture is offered to all persons that come to their house after the evening of the closing day of the puja. As the practice of greeting each on this day and on this auspicious occasion is an established custom, all persons of whatever ages, with the exception of little children, are made to partake of this harmless beverage. The use of sweets enhances the effect of the drug; but as it is taken in small quantity, it is perfectly innocuous. It is only indulged in on this occasion, and never fosters a craving or habit for its use.

36. I am not aware of alcohol being used as a substitute for hemp; nor do I think it ever likely of its being so used.

37. The effects of charas-smoking are in my opinion pretty much the same as those resulting from ganja-smoking. If there be any difference, the difference is one of intensity, the latter being more telling on the constitution than the former. The effects of bhang are quite different from those of smoking ganja and charas. They are, if taken in small quantity, quite innocuous; and a novice may indulge in a slight potation without the least unpleasant effects, while a few pulls of the other two preparations always entail unpleasant effects in the shape of headache, fits of coughing, and a derangement of the mind.

39. I am not aware of ganja and charas being taken in any other form than that of smoking, or of siddhi being used in any other way than that of a drink.

40. Bhang is much used among native doctors, especially housewives, as a corrective of dyspepsia and as a remedy to remove tendency to looseness of the bowels, and doctors of the western system of medicine do not discountenance its use on account of their observation of its good effects in some cases. Hemp is used in the treatment of gonorrhoea, tetanus, and other allied affections. I am not aware of hemp being used in the treatment of cattle diseases. Consumers of hemp enjoy some immunity from diseases in malarious and unhealthy tracts.

41. Bhang may be used safely as a help for weak digestion, and the natives of the up-country

provinces are generally in the habit of so using it daily. Charas and ganja smoking has the effect of renovating the system after great bodily exertion and fatigue, and is in use by the labouring classes before or after a day's laborious work. It also diminishes for a time a desire for food, and enables persons accustomed to its use to stand a longer privation of it.

I am not aware, from my personal experience, of hemp being used as a febrifuge or preventive of diseases.

42. Moderate use of bhang is beneficial in cases of weak digestion. Charas and ganja smoked in moderation are not baneful. They give tone to the wearied muscular system, and enable the poor labouring classes to withstand privations with greater alacrity than they otherwise would do.

44. The immediate effects of the moderate use of the preparations of hemp, especially in the form of bhang, is to create an exhilaration and buoyancy of spirit. It refreshes the system, allays sense of hunger, and creates good appetite. If kept in moderation, the preparation of hemp never produces intoxication, and the only after-effect that is likely to occur is a sense of heaviness of the head. The effects last for a few hours and are worn off after sleep. Want of subsequent gratification does produce a longing and uneasiness, and the habitual consumers can hardly stand a long deprivation of it.

45, 46 and 48. The habitual moderate use of any of these drugs produces no unpleasant or noxious influence, physical, moral or intellectual. It does not impair the constitution, injure digestion or cause loss of appetite. It has no direct effect to produce dysentery, but persons suffering from it would do well to abstain from its use. It is injurious to those who are subject to bronchitis and asthma. It does not impair the moral sense or induce laziness or habits of immorality or debauchery.

It is difficult to confine one's self to the moderate use of charas and ganja. Many persons are very apt to transgress the harmless limit, and then it has a baneful effect on the general system. In confirmed habitual smokers, especially of ganja, the drug causes a deterioration of the general health. The digestive system becomes deranged, appetite is lost, emaciation of the body and tumefaction of the abdomen follow in the sequel. The intellect is deranged, sense of right and wrong is impaired, and in confirmed habitual smokers of long standing insanity may be the final result.

In my village I know of a case in which immoderate use of ganja has given rise to insanity. In this case the drug acted as an exciting cause, there having been no predisposing cause to account for its occurrence. The insanity produced in this case was at one phase of its existence of a violent nature, with tendency to do injury to those about him. The man was put under restraint, and the use of the drug was interdicted. His health, however, commenced to fail, and he was allowed a moderate use of it. When the violent phase of the disease abated, restraint was withdrawn; and though the man again resorted to the free use of the drug, the violent phase has not returned, and I think this is due to his having refrained from excessive indulgence of the drug. There still remains in him a great eccentricity of habits and manners, and a glance at him is sufficient to show that his intellect has not regained its former equilibrium.

47. The habitual moderate use of hemp preparations is not in my opinion a hereditary habit, nor does it in any way affect the children of the moderate consumers.

49. The preparations of hemp have some aphrodisiac properties, but I am not aware of their being so used either by males or depraved females. It is not, however, improbable that reprobate libertines and the lower class of unfortunates might resort to their use for their specific action on the sexual organs.

50. See answers to questions Nos. 45 and 46.

56. I am not aware of other substances being mixed with the preparations of hemp to enhance their effects.

57. I do not know of ganja and charas being eaten or drunk.

In conclusion, the use of hemp preparations even in excess is not in my opinion so injurious to the system of the consumers, or baneful to the community at large, as the use of alcohol. If the cases of insanity, which can be traced to the abuse of this drug, were compared with the whole body of consumers and the total number of insanes, the ratio will, in my opinion, be found to be but a minute fraction, and would hardly justify the cost of labour and money that is being bestowed on the subject. But this is a matter foreign to the object of this query, and need not be discussed in any length.

139. Evidence of DR. MOHAMMAD SADRUL HAQ, *Medical Practitioner, Patna City.*

1. Medical experience.

19. They are used only for smoking purposes. Besides that, a kind of sweetmeat, called majun, is prepared of bhang.

23. Bhang is never smoked of.

28. I have no personal information thereof.

A cooling beverage is prepared of bhang, and drunk by male Hindus. Females and boys are included.

29. I have no knowledge of such a massala.

Dhatura and nux vomica are generally put in to increase the narcotic effect.

30. I have no knowledge of the extent of the consumption of such drugs; but they are largely used in company. They are confined to the male sex only. Now and then little grown-up boys are also allowed to drink bhang.

31. The habit of consuming bhang, etc., is easily formed. Bhang is a common draught for all male Hindus at sunset. Some educated persons form exceptions. When the habit of drinking bhang is once acquired, men of loose character are led to smoke charas and ganja, mixed with tobacco (dried leaf or guraku) in hukka or chillum, to increase their sexual pleasure. It is difficult to lose the habit. In fact there is always a tendency towards its excess.

32. Hindus believe that the drinking of bhang is a religious custom, as their saint Sivji was always in the habit of using bhang, charas and other poisonous substances. Bhang is freely drunk by male Hindus on the occasion of all pujas. It is regarded by them as a religious custom. Hindu monks use in the highest degree. The effects of charas and ganja are more injurious than those of bhang.

36. I do not know if alcohol is ever used as substitute.

37. There is no difference of any particular type in their injurious effects; but the effects of charas are more powerful and lasting, and those of bhang are mild. Charas and ganja act on the brain and spinal cord, paralyzing more or less motor and sensory nerves; consequently the loss of energy, exertion, appetite and sexual power, and also timidity, laziness and emaciation are their ultimate results.

39. The drinking of bhang is less injurious. Bhang does not act on the brain, nor does it retard the process of digestion.

40. I do not know any trained medical man ever prescribed ganja or charas for smoking. Cattle are never treated by these drugs.

41. The use of any of these preparations has always been injurious.

(a) None of these is ever used as an accessory or digestive food.

(b) It does not produce staying-power, nor does it alleviate fatigue.

(c) They are never used as febrifuge.

42. The use of these drugs is never without any harm.

44. The moderate use of these drugs acts, in the case of habitual consumers, as a little refreshing. It does not produce intoxication but it retards hunger. The effect lasts about an hour. Drowsiness is its after-effect.

45. Certainly they produce noxious effect on the moral and physical constitution.

140. Evidence of TRAILOKYA NATH MAJUMDAR,* *Baidya, Medical Practitioner, Bankipur.*

1. From cases that have come under my observation in the capacity of a private citizen as well as a medical practitioner.

2. Yes.

19. Ganja and charas are used only for smoking. Siddhi is used both for smoking and drinking.

23. Yes. My observations in this respect are

confined to Eastern Bengal and specially to the district of Jessore. There bhang or siddhi is used in smoking by those who are accustomed to ganja and charas generally, and sometimes by those who do not smoke these preparations; but to a very limited extent.

28. The words "moderate" and "excessive" are relative terms. The average allowance and cost

* Was invited to attend at a meeting of the Commission for oral examination, but failed to appear.

depend upon the quantity that one can consume and the cost of purchase.

29. With bhang, ordinarily, milk, sugar or molasses, aniseeds and pepper seeds are used; and exceptionally, both with bhang and ganja, dhatura seeds are used to make it stronger. I do not know of any preparation such as "bhanga massala."

30. Ganja is generally used in company. Bhang is used sometimes in company. Ganja, so far as is known to me, is not wholly confined to males. Public women are known in many cases to smoke ganja. Exceptional cases are seen of boys using both ganja and bhang; although as a general rule men, when they are young, acquire it as a habit and continue it till late in their lives.

31. The habit of smoking ganja is very easily formed; and there is a marked tendency in the case of this drug for the moderate habit to develop into the excessive. It is very difficult to break off the habit of ganja-smoking. Bhang is not taken to so readily. It is developed slowly and may as readily be given up.

32. There is a custom of using bhang on the Bijaya Dasami day,—that is, the last day of the Durga Puja. There is also a custom of using ganja on the Sivaratri day. The custom is now fast dying out, and now remains only as a relic of bygone days. Its use, so far as is known, was once essential; but now it is seldom, if at all, used; and consequently there is hardly any chance of its developing into an injurious habit. Both these occasions are observed in honour of the Hindu god Mahadeva, to whom these drugs are held sacred.

36. On account of the opening of distilleries all over the country, liquor is taking the place of these drugs. The causes are (1) its cheapness, (2) of its being more readily available, and (3) of its being more intoxicant.

37. Ganja-smoking cannot be easily given up, whilst the habit of drinking bhang can; the habit in the former case is more readily formed than in the latter.

Ganja-smoking is always injurious to health, whilst bhang is not so. On the other hand bhang, if taken in moderate quantity, keeps the digestive organs in good order. Ganja has a tendency to deprave the morals of a man. Bhang does not do so. Ganja-smoking, carried to excess, causes in most cases insanity. Bhang does not affect the system so injuriously. Ganja has a tendency to affect the respiratory system, thereby causing in many cases asthma and bronchitis.

39. *Vide* answer to question 37. Generally speaking, smoking is more injurious than drinking, because —

- (1) In smoking, it generally affects the system quickly. In drinking it affects the system slowly.

- (2) In smoking it is never used in a diluted form. On the other hand, other things, such as dhatura seeds, are used to make it stronger; whilst in drinking it is always diluted with some liquids which makes it less injurious.

- (3) In smoking there is no chance of elimination. In drinking part of the drug may be eliminated from the system.

40. Both ganja and bhang are used for their medicinal properties. Do not know whether they are used in the treatment of cattle disease.

41. So far as is known to me,

- (a) Bhang, used moderately, is digestive if drunk.

- (b) It does.

- (c) No personal knowledge; but it is said that, in malarious districts, people using ganja are, comparatively speaking, more free from malarious poison.

44. (b) Yes, to those used to it.

- (c) Yes.

- (d) No.

- (e) Bhang does, if taken moderately.

- (f) It is temporary.

- (g) There are.

- (h) Yes, it does.

45. (a) *Vide* answer to question 37.

- (b) Yes.

- (c) Yes, when regular habit is formed.

- (d) Ganja does.

- (e) Yes.

- (f) Yes. In cases known to me, it is the exciting cause of insanity generally of a violent type. Temporary at first, but might be permanent. Yes, the symptoms may be re-induced. Furious and dangerous if let alone.

- (g) Not always. So far as is known to me, none.

47. No.

48. In cases of insanity of a permanent nature, caused by excessive smoking, any issue, after the insanity has become permanent, may be similarly affected.

49. (a) Yes, it is.

- (b) Yes.

- (c) It is more injurious when used as a narcotic, because as a narcotic it is taken in excess.

- (d) When taken in excess so as to affect the nervous system injuriously, it may cause impotence.

56. *Vide* answer to questions 29 and 37.

141. *Evidence of PRASAD DAS MALLIK, Subarnabanik, Medical Practitioner, Hughli.*

1. Special study, observation and enquiry have furnished me with information regarding matters connected with hemp drugs, which forms the basis of my answers.

2. Yes. These products are locally known as (a) siddhi or bhang, (b) charas, (c) ganja.

3. It grows spontaneously in the districts of Shahabad and Champaran, and is abundant in Monghyr, Khulna, and Bhagalpur.

4. Siddhi, bhang, patti or subji; charas; majun or majum; ganja.

5. No special conditions of climate, soil, rainfall, etc., are necessary; but it grows best on an elevation of from 4,000 to 7,000 feet above sea-level.

6. It is ordinarily scattered.

7. Yes. In some parts of Dacca, in Patna, in the Tributary States of Chota Nagpur and Orissa,

in Muzaffarpur and other places. The exact extent of such cultivation cannot be stated. In Dacca, Patna and Chota Nagpur, the plant is cultivated for use as bhang; in Orissa or Muzaffarpur for production of ganja and charas. It is cultivated on the Himalayas for its fibre.

8. I cannot say whether there has been any considerable increase or decrease in the area under such cultivation.

9. The land is cleared of jungle; the seeds are put down about the end of May or beginning of June. As soon as the seedlings have fairly sprung up, the ground is carefully cleared of weeds and the plants thinned, so as to leave an open space of 3 or 4 inches between. The plants are not cut before October or November.

10. They are of the same classes as other agricultural cultivators.

11. Yes, sometimes.

13. No special conditions of climate, soil, rainfall, elevation above sea-level, are necessary. There is none where its cultivation would be impossible.

14. Yes, bhang is prepared in Dacca, Patna, Chota Nagpur. In Muzaffarpur and Orissa it is cultivated for ganja and charas.

16. (a) Yes.

(b) Yes.

(c) No.

18. Yes, they deteriorate by keeping and quite lose their effect in time. They keep good a year or so. Exposure to air and damp causes deterioration. These drugs should be so kept that they may be protected from damp and the external atmosphere.

19. Yes.

20. The lower classes and a very small number of the middle class are addicted to the smoking of ganja and charas. Fishermen, boatmen, artisans, syces, bearers (not Urayas) and religious mendicants and sanyasis are the people who are found generally to smoke ganja.

21. Chur is usually preferred for smoking, being thought to be strongest in narcotic property. Next to it the round is liked, and flat liked last of all.

22. Both native and foreign charas is used. Foreign charas is imported from Afghanistan, Thibet, Bokhara and Herat.

23. Never, as far as I am aware of.

24. Bhang is drunk chiefly by up-country men, darwans, sepoys, constables, etc.

25. It is on the decrease.

26. (a) Next to (c) in point of number.

(b) Smallest in number comparatively.

(c) This class is the largest.

(d) Third in point of numbers.

27. The habit is confined chiefly to the lower classes, who have to undergo hard work and toil and are exposed to all sorts of weather.

28. (a) 2 to 4 pice.

(b) 4 to 12 pice.

29. Aniseed, black pepper, sugar, with or without milk, are usually mixed with prepared bhang. Dried rose leaves are also sometimes added. Dhatura is rarely added. The object of these admixtures is to render bhang palatable or to enhance its intoxicating properties.

30. The consumption of ganja and charas is practised usually in company. Bhang is drunk both alone as well as in company. The consumption of these drugs is confined mainly to the male sex, to adolescence and old age. It is not usual for children to consume any of these drugs.

31. (a) No.

(b) No.

(c) As a rule, no.

32. Bhang is usually drunk on the last day of the Durga Puja. By the ignorant and unenlightened classes the use of bhang is considered essential, not so by the educated and enlightened classes. It is generally temperate and not likely to lead to the formation of the habit or otherwise injurious.

33. It is generally regarded with disfavour. Social public opinion denounces the consumption of ganja and charas. The sentiment is to be attributed to the conviction in the minds of the people that the consumption of these drugs leads to laziness, immorality and crime. I am not aware of any such custom.

34. No.

35. (a) No.

(b) Yes.

(d) and (e) It would occasion serious discontent among habitual consumers, but such discontent would never amount to a political danger.

(f) Yes; in some cases the prohibition would be followed by recourse to (a) alcoholic stimulants, (b) opium.

36. Yes; alcohol is to a certain extent substituted for ganja and charas, and the change is to be attributed to fashion.

37. The effect of charas-smoking is more sudden and intense than that of ganja-smoking, and lasts only for one or two hours; whereas the effect of ganja-smoking lasts from four to six hours.

38. No difference in kind, but there is difference in degree. Round is thought to be stronger than flat, and chur stronger than both flat and round. My opinion on this point is based on the testimony of ganja-smokers.

39. No, because smoking produces more sudden and more intense effects than eating or drinking the same drugs, although the effect may not last so long.

40. Yes, ganja and bhang are used on account of their medicinal qualities. Bhang is used in cattle disease.

41. Yes.

(a) The consumption of bhang sharpens the appetite and helps the process of digestion; hence is often prescribed in the form of tincture in dyspepsia. Ganja acts as a food accessory in religious mendicants and beggars who have their meals at irregular hours, and who, during their period of starvation, resort to ganja-smoking, which has the effect of preventing hunger.

(b) Ganja-smoking gives staying-power under severe exertion to bearers and boatmen, fishermen, etc., prevents the evil effects of exposure, and alleviates fatigue.

(c) Ganja-smoking may act as a febrifuge in malarious and unhealthy tracts.

(d) In the form of tincture ganja is very often prescribed successfully in the

treatment of tetanus, delirium tremens, sleeplessness, dyspepsia, to relieve pain and spasm.

I refer to the moderate occasional use of the drug.

42. The moderate occasional use is harmless, except to those who are predisposed to insanity. The moderate habitual use, as a rule, does not bring on insanity, except in those who are predisposed to it.

43. Yes.

44. A pleasurable sensation and elevation of spirits. It is refreshing and produces slight intoxication. Ganja allays hunger, and bhang creates appetite. The effect of charas lasts for one to two hours, of ganja four to six hours, and of bhang ten to twelve or even twenty-four hours. Yes; the want of subsequent gratification produces uneasiness and longing.

45. (a) Yes.

(b) and (c) It impairs the constitution after long use, causes loss of appetite and injures digestion.

(d) May be an indirect cause of bronchitis, dysentery and asthma.

(e) Impairs the moral sense, induces laziness, and leads to insanity and debauchery.

(f) It deadens the intellect and produces insanity only in those who are predisposed to it, or whose nervous system is weak and excitable. The insanity is, as a rule, of the violent type, and is temporary. The symptoms may be reinduced by use of the drug after liberation from restraint. A murderous propensity is a typical symptom of this form of insanity. Yes, insanes confess to the use of the drug, though they have no recorded ganja history.

(g) Yes. No.

46. The bad effects are more marked. Most cases of insanity are to be attributed to the habitual excessive use of ganja.

47 and 48. The children are sometimes found to be affected, their intellect has in many instances been noticed to be weak, and their moral sense rather

blunt. They are seen sometimes to imbibe the habit of ganja or charas smoking, but whether the habit is the result of hereditary influence transmitted to the children, is a question which I am unable to answer satisfactorily.

49 (a) Yes.

(b) Yes, by low-class prostitutes.

(c) No.

(d) Yes.

50. The excessive use of any of these drugs leads to impotence.

51 and 52. Yes; criminals who resort to these drugs have their moral sense blunted, and are very often led to commit crimes with a view to obtain the money requisite in satisfying their created wants and vicious desires and propensities.

53 and 54. Yes.

55. Yes; people are sometimes induced to smoke charas and are rendered insensible, and their things are thus robbed. Very often dhatura is mixed with it to induce complete stupefaction. Complete insensibility and stupefaction may be thus induced by ganja and charas without any admixture.

56. The intoxication caused by hemp is more intensified by admixture with other substances, whether used in moderation or excess. Dhatura is most commonly mixed with bhang to heighten its intoxicating effect for personal consumption or for administration to others.

57. In Orissa ganja is powdered and eaten by people.

58. It is working well.

60. The cultivation of hemp and its preparation are, in my opinion, sufficiently controlled.

61. Sufficiently controlled.

62, 63 and 64. No.

65. Yes, reasonable.

66 and 67. No.

68. Yes; such places should be selected, subject to local option.

69. No; the wishes of the people are not consulted, but they ought to be.

142. Evidence of NIMAI CHARAN DAS,* *Vaidya, Medical Practitioner, Chittagong.*

1. My occupation as medical practitioner.

2. Yes; may be accepted. Bhang, charas and ganja.

7. No; not cultivated in this district.

14. No; not prepared in this district.

20. The labouring classes, such as fishermen, shoemakers, up-country servants, and most of the prostitutes smoke ganja in this district. Charas is not used in this district.

21. Chur is generally preferred.

22. Not used in this district.

23. No; not used for smoking.

25. The use of ganja and bhang is on the increase. We can make out by the increase of sale.

26. (a) 50 per cent. }
(b) 12½ " } This is for ganja only.
(c) 12½ " }
(d) All. }

The number of bhang-drinkers is very limited. None smoke charas in this district.

27. Ganja is generally taken by the labouring classes to bear up fatigue.

28. For ganja only—

(a) Six pies per diem.

(b) Two annas and six pies per diem.

29. Tobacco leaf is ordinarily mixed. Dhatura is scarcely mixed.

30. Ganja is generally taken in company, scarcely in solitude. It is not confined only to male sex; females also take it. The majority are the prostitutes. Children do not take.

31. I speak only for ganja. Yes; the habit is easily formed, and it is very difficult to break off. Yes; moderate habit develops into excessive.

32. There is a sect of Hindus called "Tan-tricks," who are required to drink and smoke. The majority smokes ganja. Yes; it is essential.

* Was invited to attend at a meeting of the Commission for oral examination, but failed to appear.

Generally excessive. As far as my experience goes, I have seen all habituated. Sanyasis are also habitual excessive smokers.

33. The consumption of ganja is regarded to be heinous. Charas is not consumed in this district. People do not regard bhang-drinking to be so heinous as the other two. The use of any form of the narcotic is in disrepute, simply because people have understood, by the light of education and experience, the evil effects they produce and bring on over the human frame. The custom of worshipping the hemp plant is not prevalent in this district.

34. Yes; it will be a serious privation to habitual excessive smokers to forego the consumption and little privation to habitual moderate smokers, and it will be no privation to the other two classes.

35. Yes; the prohibition of all these drugs is feasible, and that would be doing great benefit to the people of India. There cannot be any political danger, because the use of the narcotics is chiefly confined to the lower and the poorer classes of the land. The consumers are mostly illiterate and of unsound mind. To prohibit the use of the narcotics one easy plan would be if there be a notification to the effect that no vendor will be able to sell ganja, bhang and charas for any other purpose except medical. Of course there are consumers who will suffer much for the first few months. In that case they will procure a medical certificate to the effect that such a man requires such a quantity of ganja, etc., for such a length of time. Within a year at least most of the consumers will give up the practice for the difficulty of procuring medical certificates, and then all will be in peace.

36. Alcohol is not substituted for ganja, charas or bhang, because alcohol is dearer, and the smokers being the poorer classes of the land.

38. The difference is in degree and not in kind.

40. Ganja and bhang are used as medicine by kabirajes. I have seen ganja used in cattle disease.

41. (a) Bhang and ganja are digestive if taken internally in medicinal doses.

(b) Yes; to some extent.

(c) Yes; may be used in a very mild form.

The labouring class mostly use for the purpose.

(d) I refer to moderate occasional use.

42. I think moderate use is not injurious, if taken internally for medical purposes.

43. No; even they also sometimes prove offensive.

44. They feel a little enervated. Yes; it is a

refreshment to them. I think it does not produce intoxication; if so, very little is used.

45. (b) Yes; it impairs constitution.

(c) Yes.

(d) Yes.

(e) Certainly it does.

(f) Yes; they deaden the intellect and produce temporary insanity.

46. The children do not inherit, but they learn by example. The children become weak in intellect.

48. The majority of the children born become weak in intellect, and some insane.

49. Yes; they are used by the prostitutes as an aphrodisiac. Hemp, if taken for a long time, produces impotence.

51. Yes; most of the bad characters are consumers of hemp drugs.

53. I know there was a Muhammadan in this district some twenty years ago, who was an excessive habitual ganja-smoker. All the Muhammadans of the district would call him a fakir and had great respect for the man. They believed that the man had some superhuman powers. He had consequently lots of disciples, who would supply him with ganja and food. One day one of his disciples was late in bringing him his usual smoke. He got annoyed and in his frenzy gave one or two cuts with his dhaw (an instrument of cutting), of which he died instantly.

55. I don't think complete stupefaction can be induced without admixture.

56. I have heard of dhatura leaf mixed with ganja and seed mixed with bhang and given to smoke and drink to induce complete stupefaction.

63. With regard to the wholesale vend of ganja, I propose the improvement as follows:—Ganja is cultivated in Rajshahi under Government supervision. The wholesale vendors bring ganja from that place, say at one rupee a seer. In the district they (the wholesale vendors) sell, say at 10 rupees a seer to the retail vendors, who in their turn sell at a very exorbitant rate. If Government would supply the retail vendors with ganja, as in the case of opium, the consumers would have been saved from lots of money.

With regard to the retail vend of ganja, I beg to propose as follows:—Let the system of auction be stopped, and the Government duty be increased proportionate to the sum Government loses by the stoppage. The smuggling will cease altogether. As, for instance, supposing in Chittagong there are two retail vendors, one at town and another in mufassal, say 10 miles off. In auction the town one is sold for Rs. 100 a month and mufassal one for Rs. 10 a month. The mufassal one can therefore supply ganja on a cheaper rate.

143. Evidence of TARA NATH BAL, *Kayasth, Medical Practitioner, Mymensingh.*

1. As a medical practitioner I have had to come in contact with different classes of people from highest to lowest, from Raja, Maharaja, to the meanest cultivator, with whose habits and customs it is essential on my part to become thoroughly acquainted. Moreover, in going out of town, I have had to come in contact with mahuts of elephants, coachmen, boatmen, palki-bearers, etc., among whom the habit of ganja-smoking is most prevalent. As a student of medicine and as a

votary of the healing art I am necessarily bound to know its uses and effects on human economy. These are the opportunities afforded me to obtain information regarding the matters connected with hemp drugs, in regard to which I shall have to give replies to questions put to me.

2. For my province, I mean Bengal, and particularly for this district, I hesitate to accept these definitions to be strictly correct. Here bhang or siddhi is known to be leaves of a different plant

which grows wild in many parts of the district; somewhere it grows in abundance.

19. Charas is to my knowledge never used for any other purpose than smoking, but ganja (or what is better known pharmaceutically as *Cannabis indica* or Indian hemp) is also used, besides for smoking, in many diseases. For example, in case of dismenorrhœa, gonorrhœa in the form of tincture, and in cases of cholera in the form of extract in combination with calomel when there are severe spasms; also by some in cases of tetanus and also as an anodyne. I have seen people to pass ganja fumes into the ear in cases of ear-ache.

23. I am not aware of bhang being ever used for smoking; it is generally used in the form of sherbet or bolus.

28. (a) From one pice to one anna, or one anna and a half by each. (b) No less than four or six annas by each.

29. Charas is generally mixed with ganja for smoking. Ganja is exceptionally mixed with bhang for the purpose of drinking. Dhatura, opium, nux vomica, cantharides, or betel-nut are not so used to my knowledge. The object of above-mentioned admixtures is to induce greater degree of intoxication.

30. Bhang is very extensively used by the people of Behar and North-Western Provinces. This district has for its residents a very large number of big zamindars. Lots of up-country men are retained by them as their personal attendants, porters, and for other manifold services. They are perhaps, without a single exception, found to consume bhang daily. This drug is generally used in solitude and exceptionally used in company, but ganja is exceptionally used in solitude and generally in company. Use of each of these drugs is of course mainly confined to the male sex, but there are some village women among the low-class people who contract these evil habits from the male members of the family. Among the higher class of people I know of no member of the fair sex using any of these drugs. It is not usual for children to consume any of these drugs, but I know of one or two instances in which among the lower class of people, children consume ganja. Ganja is very extensively consumed by the low class of prostitutes.

31. The experience I have of the matter leads me to conclude that the habit of consuming any of these drugs as also other narcotic drugs, such as opium and alcohol, is easily formed, and it is not easy to break off the habit. Yes; people generally acquire a tendency to go to excess after beginning it moderately, especially in the case of ganja, but not so with bhang.

32. As far as I am acquainted with the injunction of the Shastras, there is nothing in them to bind the Hindus to consume any of these drugs on any occasion. But there is a custom prevalent among the Hindus to consume bhang on Navami or Dashami day of Durga Puja. On such occasions this is generally used temperately, and I should say that nowadays such custom is not regarded as essential, and such custom is not likely to lead to the formation of the habit or otherwise prove injurious.

36. I find no reason for thinking that alcohol is now being to some extent substituted for any of these drugs. The use of the drugs is most generally prevalent among the lower class of people, who cannot afford to pay for the luxury of drinking alcohol in any form.

37. Smoking of charas is apt to induce greater

degree of intoxication than that of ganja, as charas is stronger than ganja, this being the alkaloid derived from the Indian hemp plant, as quinine is stronger than the bark of cinchona itself; and it is therefore more injurious than ganja itself. Yes; drinking of bhang differs in its effects from smoking either charas or ganja. A tola of bhang is not apt to induce same degree of intoxication as a tola of ganja or charas, neither are they similar in producing physiological action on human economy. A man consuming a tola of bhang is not apt to induce a man to talk incoherently or irrationally, but the same quantity of ganja or charas will throw a man to an extreme stage of delirium and hallucinations.

39. I believe that smoking is more injurious than drinking or eating. As a student of medicine, we generally find that inhaling a medicine is more rapid in its effects than eating or drinking. As regards treating the subject both in reference to the general effect of the drug (I mean ganja) on the constitution and also with respect to any supposed tendency towards producing insanity, I would refer you to pages 1026 and 1027 of A Text Book of Pharmacology, Therapeutics and Materia Medica, by T. Lauder Brunton, M.D., D.S.C., F.R.S., &c., edited in 1887.

40. If the native doctors are meant for kabirajes, I know that they use bhang for medicinal purposes in cases of chronic diarrhœa and as an aphrodisiac in the form of kameshar batika, but I am not aware that they ever use charas or ganja medicinally. As I am not a veterinary doctor, I am not aware of any of these drugs being ever used in the treatment of cattle diseases.

41. I don't think so.

(a) Not necessary for a man in good state of health.

(b) Yes.

(c) I don't believe.

(d) No.

42. I don't believe that continuous moderate use of any of these drugs is quite harmless. Every drug or medicine, whether narcotic or non-narcotic, has some action, whether used moderately or excessively, on some particular organ or organs of a human being, whether it be alcohol, bhang, ganja, or charas, or any other drug, and I am inclined to believe that continuous use of any of them is apt to induce some organic or functional mischief upon those who take them, as digitalis and strychnia are apt to induce cumulative action upon the heart and brain or the spinal cord respectively if even continued medicinally for a long time.

44. The immediate effect of the moderate use of any of these drugs is the production of exhilaration of spirits and of hallucinations of a pleasing kind on the habitual consumer; it is refreshing also. Yes, it produces intoxication to some extent. I can't say whether it allays hunger or not. Bhang creates appetite for the time being, but ganja and charas are not apt to do so. The pleasing effect lasts for a short time, to be followed by stupor and sleep. When a person is habituated to its use, subsequent want of gratification is most apt to produce longing or uneasiness.

45. (b) Yes.

(c) Yes.

(d) It causes dysentery and bronchitis: a ganja-smoker generally (of course habitual consumer) dies of dysentery.

(e) To a considerable extent.

(f) and (g) Moderate use of the drug, par.

ticularly ganja, continuously may not utterly deaden the intellect, but certainly it is impaired considerably. It is an established fact, and supported by many an Indian authority on the subject, that ganja is one of the chief causes of insanity; in my opinion, it appears to be an exciting cause. Generally it produces insanity of a violent type. Majority of habitual consumers become permanently insane, never to be cured. Some become temporarily so, and become sane on breaking off the habit. In cases of temporary insanity symptoms are apt to be re-induced on resuming the habit. I am aware of one person, by name Bhakta Poddar, in this district, who was a confirmed ganja-smoker, to become insane under its continuous use, and he was not fit for any duty in life, but after some years I found him sane. On enquiry I learnt that he gave up the habit of smoking ganja. In his case, on enquiry, I came to learn that some mental anxiety about some family matters tended to give rise to indulgence in the use of ganja. I am not in a position to declare positively whether this question has been sufficiently considered in explaining the connection between insanity and the use of ganja. I cannot say whether insanes who have no recorded ganja history confess to the use of the drug. I think there is evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs by a person who is deficient in self-control through weakened intellect.

46. To this question I should reply that what has been said about the habitual moderate use of the drug (ganja) on the consumers, appears in the aggravated form in cases of habitual excessive use, and the effects are apt to be more rapid in these cases.

47. Not necessarily. Children of many a ganja-smoker or bhang drinker or eater are entirely free from the evil habit. In some cases habit may be inherited as other propensities and aptitude of a father are inherited by sons, such as propensity

for the pursuit of literature on the part of the father is inherited by the son. As regards affecting in any way the children, I should say that deterioration of general health of the father, induced by the continuous use of the drug, may act as a cause for producing unhealthy children.

48. The same may be said of the habitual excessive use.

49. Moderate use of ganja or bhang is practised by many as an aphrodisiac. Yes, it is so used by low-class prostitutes. Hemp, when used habitually, is apt to produce impotence in the long run, as is the case with every other narcotic, such as alcohol, opium, etc., especially when used to excess.

50. What has been said under the head of continuous moderate use only appears in the aggravated form, and more rapidly in cases of excessive use.

56. Answered under some other head.

57. I know of no person who eats or drinks ganja or charas. I have therefore no experience of the effects produced by using the drugs in that manner.

In conclusion, as a nearly permanent resident of the district I am in a position to say, both from information obtained through reliable sources and from personal observation, that the use of ganja is very extensive in the district among low-class people. I am of opinion that bhang is less injurious than ganja, and it is rarely apt to be taken to excess. Under several heads I have expressed opinions regarding effects on human beings produced by the moderate and excessive use of the drug habitually,—opinions formed by study of pharmacology, personal observation, and occasionally experiment on my own person,—and from all these I am led to believe that these drugs, except for *bona fide* medicinal purposes, are more or less injurious in their effects on the human body.

144. Evidence of NOCOOR CHANDER BANERJI, Brahmin, Medical Practitioner, Bhagalpur.

1. I was in the medical service of Government and am now in medical practice. More than twenty-six years have passed away during which I am engaged in medical profession.

2. Yes. These definitions are accepted in this province. These products are known as bhang, subji, patti, charas and ganja, of which last the three varieties are—(1) chipta or flat ganja, (2) gol or round ganja, (3) chur or baluchur or broken ganja. It is to be noted, however, that the wild bhang which grows in the district does not produce ganja or charas.

19. Yes; they are used for smoking. Ganja in the form of chur is sometimes used as drunk with bhang to increase its effects. Ganja-smoking is practised in Bhagalpur, but charas-smoking is not practised here.

23. Bhang is not used for smoking in this part of the country.

28. Ganja—(a) One pice weight, worth one anna six pices. (b) One chatack weight, worth about 11 annas.

Bhang—(a) One pice weight, worth one pice. (b) Three pice weight, worth three pice.

29. Tobacco in the form of khaini or tobacco mixed with lime is mixed with ganja, which is used for smoking, and the bhang is mixed with golmarich or black pepper, elachi or cardamom, badam or almonds, sonf or aniseed, supari or betel-nuts, kesur or saffron, and kasni or endive chicory. The above ingredients are called bhang massala. There is another preparation called bhang barfi or majum, which is made up of bhang, sugar, ghee, and other spices as mentioned above.

30. Bhang is used by a smaller number of people than the ganja. It is used by the males generally in all ages above five years. Bhang or ganja is used more in company than in solitude.

31. Habit is formed after about five or six days in cases of ganja-smoking, and after about ten days in cases of bhang. It is not difficult to break off the habit. There is a tendency for the moderate habit to develop into the excessive.

32. In the time of Fagua, the Holi festival of the Hindus, ganja and bhang are used as a custom. They are not essential. They are sometimes used excessively during the occasion. This custom runs into habit in some cases.

36. Yes. Alcohol is substituted in some cases by ganja or bhang, alcohol being dearer than the other ingredient. The consumers of alcohol have recourse to the latter substances.

37. Effects are stronger in the case of charas than in the case of ganja. The effects in the case of bhang-drinking are slower in developing than in cases of ganja or charas.

39. Drinking of any preparation of the hemp plant is less injurious than in the cases of smoking or eating the same. In the case of eating, the intoxication is rather severe. In the case of smoking, the effect is immediate. The excessive drinking of bhang or smoking of ganja produces insanity.

40. Yes; native doctors or kabirajes use ganja or bhang in the several diseases of human beings, and also in several diseases of the cattle, such as loss of appetite and diarrhoea.

41. Yes; the moderate consumption of ganja or bhang primarily gives more appetite and proves digestive. It gives a staying-power under exposure or exertion, and alleviates fatigue. It might be used as a febrifuge or preventive of disease in malarious and unhealthy climates. This is never used as accessory to food.

42. Moderate use is beneficial under such conditions, but through the continued use it becomes harmful. There is another danger, as from the moderate use it leads to excessive consumption, and is thus productive of the pathogenetic effects of the drugs.

44. In the case of bhang the effect is refreshing, but in cases of ganja-smoking the effect is quite different. A feeling of hot sensation is produced in such a way as to produce perspiration, and the consumer, while standing, might fall to the ground. The effect is intoxication when it allays hunger. It creates appetite in the first stage. In cases of smoking ganja intoxication remains from half an hour to one hour, whereas in cases of bhang drinking or eating, intoxication remains from five to six hours. It begins about one hour after its consumption. In cases of ganja-smoking, nausea and mental dullness are the after-effects. Heaviness in the head, exhaustion, mental dullness, constipation, high-coloured urine, emaciation, jaundiced congestion, loss of venereal power, and shortened lives are the subsequent effects. In cases of bhang drinking or eating there are no such kinds of after-effects. Appetite and digestion improve primarily, but afterwards mental dullness, loss of appetite, exhaustion, emaciation, pains in the limb, derangement of the stomach and intestines producing flatulence, are the subsequent effects.

In cases of ganja-smoking, the want of subsequent gratification produces longing and uneasi-

ness. In cases of bhang drinking or eating, such is also the case in a moderate degree.

45. Yes, the habitual moderate use of any of these drugs produces noxious effects. It impairs constitution, injures digestion, or causes loss of appetite. It causes bronchitis, dysentery and asthma. It impairs moral sense, induces laziness; and habits of debauchery are formed. It produces ill-effects on the brain, producing insanity. It might prove as an exciting cause of insanity where there is heredity of the disease.

Bronchitis.—In the case of Mangal Maha, who was a consumer of bhang, ganja and opium, bronchitis was the disease. The patient had good deal of expectoration and fever. He died from exhaustion.

Dysentery.—In the case of Bissesswar, who was a habitual consumer of bhang (quarter of a rupee in weight daily), dysentery was the disease, complicated with liver disease. The patient died from exhaustion.

Asthma.—In the case of Sheo Narain, who was a habitual consumer of ganja for about twenty years, asthma was the disease. He is still living.

46. The excessive use of any of these drugs produces diseases, but it depends upon the susceptibility of consumers to be subject to the various diseases.

47. The habit is formed not necessarily from heredity, but when the person uses any of these drugs moderately he forms the habit.

48. In the similar way habit is formed from the use of these drugs, and not necessarily from heredity.

49. Moderate use of bhang or smoking of ganja is practised as an aphrodisiac. Prostitutes do not use any of these drugs as an aphrodisiac. The use of any of these drugs as an aphrodisiac tends to more harm than its use as a narcotic, because the consumers in the former case are given up to debauchery. Habitual use of ganja (-smoking) tends to produce impotence.

50. The excessive use of ganja (-smoking) leads to impotence.

51. Dhatura is mixed with bhang to increase its effects for personal consumption and in cases where it is necessary to put any person into trouble.

52. Ganja in the form of chur is drunk with bhang to increase its effects.

In conclusion, in my opinion, the hemp plant possesses remedial virtues which cannot be dispensed with in our treatment of the most common diseases of India. It exercises pathogenetic influences when resorted to in health. In my opinion, the Government ought only to encourage and protect the cultivation of these hemp plants to the extent it is required for medicinal purposes.

145. Evidence of LUCKHMY NARAIN NAIK, *Mahanyak, Medical Practitioner, Cuttack.*

19. Only for smoking purposes. Sometimes it is drunk like bhang.

23. No.

28. (a) The average cost is two pice per day for the habitual moderate consumers.

(b) The average cost is two annas per day for the habitual excessive consumers.

29. The ganja-smokers generally mix tobacco

leaf with it, and the following ingredients are at times mixed with it, in order to increase its narcotic actions, viz., dhatura, opium, roots of grass, and also mix sandal-wood and cardamom to make it soothing and perfumed. Moreover, there is a preparation called majum, which is ordinarily sold by ganja vendors in this country, which is prepared with sugar, ganja, flour and milk, i.e., somewhat like lozenges. This majum

is prepared for the private consumers, *i.e.*, for those who are unable to smoke ganja publicly, as it is hateful.

30. The average consumption of ganja in solitude is half a tola and in company is three or four tolas. It is chiefly used by the male sex, but occasionally used by women of lower castes and prostitutes. There is no necessity of smoking ganja at any time of life. Children are not accustomed to, nor feel necessity for it.

31. The habit can be easily formed, but cannot be broken off so easily, as the person in the habit of consuming a particular quantity of these drugs feels very little intoxicated; he is consequently obliged to increase the quantity.

32. There is a custom among the Hindus to smoke ganja and drink bhang in Pana-sankranti and Durga Puja Bijaya—two Hindu festivals (one before the god Mahadev and the other before the goddess Durga). At these times pana or sherbet is prepared with the following articles, *vis.*,—milk, sugar, mango, plantains, camphor, coconut, cardamom, cinnamon, nageswar, saffron, etc.,—and drunk by the Hindus with eager. They use such pana only for the purpose of intoxicating themselves, in order that they may fix their attention to the holy worship, which practice is totally incorrect. I do not think it to be essential, nor does it lead to the formation of the habit. It is not injurious if taken moderately.

36. No. Alcohol is not substituted for these drugs. Hemp is specially used by the lower-class people and scarcely by the gentlemen of the present time. People smoke hemp, etc., only to satisfy their carnal desire, which cannot be equally done by alcohol.

37. I know nothing of charas, as it is not used in this part. Ganja-smokers generally suffer from asthma and become emaciated after using the drug for a long period if no nourishing food is taken, but bhang is not so injurious as ganja. The latter affects the grey substance of the brain, produces insanity, and stops the secretion of the bronchial capillaries and lactials and minute cells of the human organs.

39. Drinking bhang as sherbet during sultry and scorching heat of summer with more spices and very little of bhang is alleged to be a soothing drink which brings sleep. It is drunk more in the summer than at any other time of the year. Ganja-smokers are often found of irritable temper, apparently due to its action on the brain, and this seems to be the cause of producing insanity in some cases.

40. The native physicians generally use siddhi and hemp, etc., for medicinal purposes, simply for the evil desires. The medicine is called madak, which is used by those rajas and zamindars who are addicted to pleasing thoughts and desires. Though the hemp has the power of allaying pains, yet as far as my experience goes, I think that the power of allaying pains is indirect and temporary, *i.e.*, for a few minutes after the madak being taken.

41. (a) None of these drugs are beneficial as a digestive.

(b) These alleviate fatigue to some extent, only those who are habituated with these.

(c) It has no preventive power to the malarious poisons.

42. It is not at all beneficial, on the contrary harmful, as it disturbs the proper actions and disorganizes the proper functions of some useful organs.

44. They immediately affect the brain and cause giddiness and congestion of the eyes, and also said to increase hunger. After smoking or drinking bhang the men are inclined to take much more quantity of food than usual, but it produces indigestion and causes uneasiness.

45. Yes; it produces noxious effects mentally, morally and physically. It affects the lungs and also produces insanity, which has been mentioned above. I am told a man in the habit of smoking ganja murdered his mother just after smoking, and afterwards, when the reaction set in, looking at the stream of blood flowing from his wounded mother, went to murder the man by whom he was induced to the habit of smoking ganja.

47. No.

49. The hemp is in some degree aphrodisiac. It is commonly used by male sex for the purposes mentioned in question 40, and I do not know whether women use for the same desire or not. It is an injurious aphrodisiac, because it tends to produce impotency, as it delays the discharge of semen at copulation, which causes nervous paralysis.

57. I am not aware of charas-drinking. The effects of intoxication from ganja-drinking is different from that of smoking. The intoxication by the latter process, though not so much lasting as by the former, is more injurious to the health from its rapid action on the brain.

In conclusion hemp and bhang when used in religious ceremonies affects nothing and should not be put a stop to. The use of the drugs in medicinal purposes should not be interfered with, as it will be impracticable. The excessive use of these drugs merely for the sake of intoxication should be discontinued by raising the taxation.

Oral evidence.

Question 1.—I was educated in the Government Medical School at Cuttack, and got the diploma of V.L.M.S. (Vernacular Class Hospital Assistant). I am 32 years of age, and I have been practising medicine for the last ten years privately.

Question 37.—I have never made a *post mortem* of a ganja case.

Question 45.—Moderate use of ganja leads to the excessive use. The habitual moderate consumers, as well as the excessive consumers, suffer in their lungs and become insane. My definition of a moderate consumer is a man who takes as much as his habit has enabled him to stand without becoming insensible. A man who takes 2 pice worth is moderate, and a man who takes 2 annas worth may be moderate for him,—*i.e.*, if he can stand it. No intoxicant can be taken in moderation except when administered medicinally.

146. Evidence of *BASSUNTO KUMAR ROY, Zamindar and Medical Practitioner, 24-Parganas.*

1. (a) My professional knowledge as a medical practitioner. (b) Zamindar.

14. They are not prepared in this country.

19. Ganja is used for smoking and for the preparation of some quack nostrums.

20. The lowest classes generally and a small minority of higher class people use ganja.

24. People of all classes, majority of them being of the lowest class.

30. Ganja and charas are consumed in solitude. Males generally use them; children never take them.

31. (a) Yes.

(b) No.

(c) That is the case with every intoxicating thing.

32. Devotees (mahants) as a class generally consume ganja and bhang. Devotees consider them essential for the preservation of their health. Their habits are temperate, and are not otherwise injurious to them.

35. The use of charas should be prohibited and that of ganja and bhang restricted by some legislative enactment. This procedure would neither produce any serious discontent nor cause any political danger.

40. Yes, bhang is used by kabirajes for their astringent pills for digestion. Tincture of Indian hemp is used for several diseases in the old school of medicines.

41. (a) Bhang is used as a digestive, and under certain circumstances of fatigue to overcome the exhaustion.

(c) As a febrifuge and digestive bhang is used by kabirajes. Tincture of Indian hemp is also said to possess anti-periodic properties, but is less used than opium.

65. (a) Taxation upon charas should be greater than that of ganja and bhang.

(b) Alcohol being more detrimental to the health of the public than bhang, the tax upon bhang should be lowest of all.

68. Yes, there are houses for this purpose.

147. Evidence of *GURU CHARAN GHOSH, Medical Practitioner, Monghyr.*

1. My twenty years' experience as a medical practitioner enables me to form an opinion regarding the matters connected with hemp drugs.

2. Yes. Charas, ganja, and bhang or siddhi.

19. Ganja and charas are only used for smoking.

23. I have never witnessed bhang or siddhi used in smoking, but it is heard it is used in Bengal and Behar amongst the middle class of the people.

28. Not known to me.

29. Black pepper is ordinarily mixed with siddhi, and tobacco with ganja and charas. I have experienced dhatura mixed with bhang in strengthening intoxication. Yes; cucumber seed, rose leaf, black pepper, aniseed, cardamom, cinnamon, are the ingredients known to me for the preparation of bhang.

30. The consumption of these drugs is practised generally in company and seldom in solitude. It is mainly confined to the male sex and to all stages of life. Yes, children of bad character consume these drugs.

31. (a) Yes, it is easily formed.

(b) No, it is not difficult to break off.

(c) Yes.

32. The consumption of these drugs is not in fact essential to the observance of social or religious customs, but the illiterate and ascetic class of men use them as an auxiliary to their religious contemplation. It is generally excessive. Yes, it leads to the formation of habit as well as proves injurious.

36. Yes; alcohol is to a certain extent substituted for these drugs.

The reason for this change is attributed to the fact that it is more fashionable.

My own experience is the proof of this change.

37. The result of ganja-smoking differs from charas in this, that the former is more strong and active in its action than the latter, but both at the end bring on a disorder of the brain. On the other hand, bhang is a little mild in its effects and irritates the stomach.

39. Yes, the reason for this being that in eating or drinking it comes in contact with blood and thus produces a baneful effect on the constitution. But smoking is rather supposed to do more mischief to the brain than eating or drinking, and is therefore more incentive towards producing insanity.

40. (a) Yes.

(b) I have no experience in the treatment of cattle disease.

41. Yes.

(a) As a food accessory or digestive.

(b) Yes.

(c) Yes; as a febrifuge and preventive.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumer is certainly refreshing. It produces a little intoxication, creates appetite, and its effects last for a couple of hours or so. There are no after-effects. The want of subsequent gratification produces a little longing and uneasiness.

45. (a) to (e) No.

(f) No. The moderate use of any of these drugs has not appeared to me to be the exciting cause of the insanity.

46. In many cases known to my experience it has appeared to me that the habitual excessive use of these drugs, especially ganja, has been the exciting cause of insanity and has also produced all the diseases mentioned in paragraph 45, such as dysentery, asthma, etc.

47. No, not at all.

48. I do not think so.

49. (a) Yes, to a certain extent.

(b) I have no experience.

(c) No, not more injurious.

(d) Yes; excessive use of hemp tends to produce impotence, and not the moderate use.

50. The excessive use of any of these drugs does not excite venereal desire.

56. In moderation and in excess the modification tends to increase the mischievous action.

Not known to me.

Oral evidence.

Question 1.—I was a student in the Calcutta Medical College for 2½ years. I took no degree, as I did not complete the course. It is twenty

years since I left college, and I have been practising all that time. First I entered the service of the King of Oudh as family physician, and remained there twelve years. Since then I have been in independent practice.

Question 46.—The insanity caused by the excessive use of ganja is sometimes permanent and sometimes temporary. I have treated two cases of permanent insanity due to ganja as the exciting cause. I cannot say whether there were other causes. I have treated three or four cases in which the insanity was temporary. The insanity lasted one or two months, and when the habit was dropped the insanity was cured. The symptoms in permanent and temporary insanity from the hemp drugs are the same, except that the symptoms in permanent cases are more severe. The symptoms of hemp drug insanity are the same as those of any other sort of insanity.

148. Evidence of ANNADA PRASANNA GHATAK, M.B., Private Medical Practitioner, Arrah.

1. Experience as a medical man; experience gained from coming in contact with people using the drugs, and from inmates of lunatic asylums and jails.

18. Yes; these drugs deteriorate by keeping, and quite lose their effect when very old.

19. Yes, for the most part. Ganja is sometimes taken with bhang to intensify the narcotic effects of the latter.

20. Ganja is smoked by the labouring classes and by ascetics, especially Sivaites or worshippers of Siva.

30. (b) Mainly confined to the male.

(c) Very rare.

33. Ganja-smoking is looked down upon by the better classes of society. Ganja-smoking is looked down upon because it injures the health, both of the body and mind.

34. The labouring class may be slightly inconvenienced by being deprived of the ganja, inasmuch as the drug serves to sustain them during work in the absence of food, but only temporarily.

40. Bhang is prescribed by kabirajes and bakims.

41. (a) Bhang to some extent.

(b) Smoking of ganja is said to do so.

(c) These drugs are not known to have any direct febrifuge or anti-malarious property, though *Cannabis indica* is sometimes used for its indirect effect in cases of chronic fever.

(d) The labouring classes use ganja for its so-called sustaining power; this effect is produced when the drug is used to a moderate extent.

42. Apart from any other evil effects, the moderate use may lead to the excessive use, and prove injurious in this way.

43. Yes.

44. The moderate use of these drugs leads to temporary exhilaration, specially in cases of fatigue or bodily exertion. Those using the drugs say that they sharpen the appetite to a certain extent. The habitual use does create a longing when the drug is withheld.

45. The habitual use impairs the healthy tone of mind, and creates a longing to satisfy which petty crimes are committed. Causes dysenteric complaints, especially in those who don't get adequate food.

46. Persons smoking ganja excessively and habitually are known to have been affected with insanity.

49. Ganja and bhang are known to be used as aphrodisiacs.

53. The excessive indulgence in ganja leads to excitement and loss of self-control; and under such circumstances crimes may be committed.

54. Dacoits are said to use ganja and bhang for such purposes.

55. Yes; those who are not accustomed to these drugs would be stupefied if they are made to partake of them.

56. Dhatura seeds are mixed with ganja and bhang to intensify their effects.

Dhatura is administered in mixtures for criminal purposes. People are thus drugged and robbed very often.

149. Evidence * of RAKHAL DAS GHOSH, Private Medical Practitioner, Calcutta.

I am a private medical practitioner of this city. About seventeen years ago I was in Government employ, but resigned service to practise independently. My experience of hemp drugs is derived from my practice as a physician and surgeon. I took my degree of L.M.S. in 1875. I was two years in Government service, and resigned only to better my prospects.

In three principal forms hemp is sold in the Indian markets, viz., ganja, the dried flowering tops of the plant *Cannabis indica*, from which the resinous exudations have not been removed; charas, the dried resinous exudations from the leaves, stalks and flowers; and bhang, subji or siddhi, the leaves of wild ganja plants. Of these three varieties, ganja and charas are generally

* This written statement was read to the Commission by witness, when a few modifications made by him orally were incorporated.

smoked, while bhang is taken in the shape of a drink.

It is unnecessary to say how ganja and charas are smoked; suffice it to say that before smoking, ganja is pulverized, mixed with tobacco leaf, and made into a sort of pill mass by the manipulation of the operator's right thumb over the left palm, with the addition of a few drops of water; while charas is mixed with prepared tobacco after drying it over fire. The smoking is generally done by chillum or huka. Bhang or siddhi is taken as a drink, and is prepared by pounding it on a pestle and mortar with rose leaves, black pepper, cucumber, water-melon, cardamom seeds, and then either mixed with milk and sugar or plain water. Sometimes siddhi is chewed with pan.

The effects of the three varieties are identical; except when smoked, the action is more rapid. Ganja-smoking is more or less prevalent amongst all classes of men, but it is more widely used by the lower classes of society than by the upper ones. Native musicians, as a class, smoke ganja with the object of improving their voice. The lower orders of East Indians and Portuguese also smoke ganja. I think it is on account of its cheapness that the ganja is largely consumed by the poor. There are some persons who must have some intoxicant, no matter what it is—ganja, charas, bhang, opium or wine; but their number is limited.

The habit of smoking ganja or charas is first contracted, in the case of those who generally lead a life of dissipation, for its aphrodisiac properties. It is a prevailing notion among such men that they are able to go on with their peculiar mode of life for a longer period if they smoke ganja. The exhilarating effects produced by the moderate use of this drug are highly appreciated, and the smoker with his sharpened appetite can not only eat plenty of food, but, so long as the effects last, forgets all the miseries and troubles of his life, without any detriment to his constitution. It is not unusual for some to imbibe the habit of ganja-smoking for some bodily ailments, such as rheumatism, colic, dyspepsia, etc., but the majority of the consumers contract their habit from dissipated mode of life and bad company. When once the habit is well formed, it is very difficult to shake it off. I have seen persons who can daily consume ganja to the extent of a tola, and siddhi to the extent of more than half a pound. Fakirs or ascetics are invariably ganja-smokers, and people will be surprised to hear the quantity of ganja they smoke and siddhi they consume in 24 hours. Sometimes they become so habituated to its use, that exhilaration and intoxication are no longer produced in them, so that they have to combine ganja with other intoxicants, such as dhatura seeds. Some of them also mix white arsenic with their bhang. I have seen a young man of a high aristocratic family of Calcutta consuming bhang to the extent of a pound a day, and at times even putting small quantities of arsenic with his drink.

I do not share the opinions of those who say that moderate ganja-smoking is always productive of mental derangements. The Indian fakirs or religious mendicants are proverbially ganja-smokers, but they never show symptoms of insanity; on the contrary, they are generally quiet and inoffensive. Moreover, they assert that they can concentrate their attention better after a ganja smoke or bhang drink. Those that are the offsprings of parents who are themselves liable to brain disorders suffer from mental aberrations when they contract the habit of ganja-smoking. I

know a man who worked as an assistant to a respectable merchant of this city lose his job for this habit. His hallucination was that he had become a mahant, and that every one would pay respects to him for his dignified position. Gradually his smoking was reduced, and he is now free from that mental aberration. From this and other similar cases, I have come to the conclusion that smoking of ganja is not the sole cause of madness.

I was for a while in the heart of a country so notorious for bhang-drinkers. The Brajabashis and Chaubes of Mathra are proverbially bhang-drinkers and ganja-smokers. From infancy they imbibe this habit, and never give it up till death. They are generally healthy and stout, and some of them are great eaters. Pilgrims who go there for amusement, feed them, and it is no exaggeration to say that many of them can take five to ten seers of food in one sitting. At first, I could not believe such a thing, until I was one day invited to witness this fact. They say that they cannot eat half as much unless they take a sufficient quantity of bhang beforehand.

Bhang or siddhi is a household remedy of the natives of Bengal for various complaints, especially indigestion. I have seen persons suffering very badly from dyspepsia materially benefited by the moderate use of bhang, combined with aromatics, before food. For its benefit in indigestion, stomach-ache, loss of appetite, and other complaints, it enjoys a good repute amongst the orthodox Hindus, who never forget to put the name of siddhi (signifying success) at the head of the list of articles intended to be bought for any social or religious ceremonies.

Now as to the question whether ganja or bhang is always used for purposes of intoxication, revelry or dissipation, my answer is in the negative. In countries like Bengal, Orissa and Assam, where poor inhabitants in their daily life are constantly exposed to all vicissitudes of temperature, now burning under a scorching sun, at the next moment being drenched by a heavy shower, it cannot be gainsaid that all sorts of tropical diseases are rampant. Malarious fevers, diarrhoea, dysentery, cholera, influenza, eruptive fevers, are all endemic, and it is a wonder how the people of such places could survive the dire ravages of these diseases. Though thousands of men succumb annually to these maladies, still a large percentage is left to prevent the countries being made deserts. How this large per cent. of people escape the jaws of death amidst such insanitary surroundings? The poor sufferers who cannot either afford to have medical help or medicines, or to travel miles to avail themselves of the benefit of the charitable dispensaries, are saved from their untimely deaths by the use of those drugs which are now the subjects of two Government Commissions. It is a fact beyond dispute, that those who moderately use ganja or opium can tide over or pull through an epidemic better than those who do not. Tetanus, rheumatism, ague, diarrhoea, dysentery, cholera, dyspepsia and many painful disorders of the urinary or generative organs yield to the anodyne, soporific, antiperiodic, antispasmodic, and other properties of ganja or opium. Aided by these remedies the inhabitants combat for life and death. How many people of this description become the denizens of lunatic asylums and are quoted as proving to the world that ganja is one of the most potent factors of insanity? Those hard inebriates who lead a life of debauch and dissipa-

tion are mostly the persons who swell the list of the inmates of the asylums and are prone to commit mischief.

I am not prepared to accept the opinion that ganja smoking or bhang drinking are doing great injury to the moral tone of our society. I believe that more misery, distress, poverty, and untimely deaths amongst the population of the country are produced by the wide-spread sale of spirits and liquors than by the consumption of ganja or opium, or by the both. Before any legislative measures are taken for stopping the sale of ganja or opium, or before any step is taken to increase its duty, it is imperative on Government to ap-

point a Commission to enquire into the wide-spread belief that our country is suffering more from the evils of easily accessible Europe wine shops and country liquor stalls than those arising from the sale of ganja or opium. In well-informed circles, it is considered almost a truth, that the moral tone of our society has undergone a change for the worse since, owing to the increase in the number of shops, the public have improved facilities for obtaining liquor and spirits; and the people fear that if Government restricts the sale of ganja, opium or bhang, many of them are sure to contract the vice of drinking, which, in their estimation, is a worse evil than the existing ones.

150. *Evidence of DURGA NATH CHAKRAVARTI, Brahmin, in charge of Tangail Dispensary, Mymensingh.*

1. I am a resident of Tangail and practising here for these fifteen years. Ganja consumption is very great here. I have seen many ganja smokers myself.

2. Bhang plant is indigenous here. Ganja plant is a different species of the same plant, of which one or two I have seen here. The distinction I could make is only in the vigorous growth of ganja plant and its containing more resinous matter. In all other points I accept the definition laid out here.

19. I have no experience about charas. My answers will deal about ganja and bhang only.

Ganja is generally used for smoking, but ganja is also taken mixed up with sweetmeats known commonly as majum.

23. No. I have seen one man only who smoked bhang occasionally.

28. Bhang being indigenous here, it costs nothing to the people here.

About ganja the cost will run thus:—

	R	a.	p.
(a) Habitual moderate consumers	0	0	6
(b) Habitual excessive consumers	0	2	0

29. Ganja for the purpose of smoking is ordinarily taken in its simple form without any admixture. Bhang mixed with ganja, betel-nut, cantharides and nux vomica, in the shape of sweetmeat, is exceptionally taken for heightening its aphrodisiac property. Ganja mixed with bhang is used by sanyasis (hermits) to keep them absorbed in religious meditation. Bhang is taken here in the form of liquid. At first the leaves are made into a pulpy mass and then mixed with water and salt, or milk and sugar, and taken internally by mouth.

30. Ganja and bhang are generally used by the male sex only. I have seen some ten women to smoke ganja habitually. I know many children to smoke ganja. Use of bhang is restricted here only among adults and old people. Few children take them.

31. Ganja smoking easily begets into a habit and is difficult to break off; difficult to keep the habit moderate without going to excess.

Bhang also begets a habit, but not so easily; and not so difficult to break off. Moderate habit can be kept up.

32. There is a custom here among the common class of people to smoke ganja and worship "Trailakyanath." Some ten to fifteen men

assemble and offer ganja to the deity, and then they sing for the whole night and take ganja. Habitual ganja smokers generally are the votaries of the worship, but it is not uncommon that now and then some persons are converted.

36. Ganja smoking is very common among the common people here. Alcohol is generally taken by middle and higher class people. Some class of common people, such as Bagdis and Modbais, etc., take alcohol and ganja both. I don't know why one is substituted for another. The higher expense of alcohol plays most likely a part in it.

37. Bhang drinking is practised generally to check diarrhoea and indigestion. It is used moderately. I have no experience about charas.

40. Yes; bhang is generally used to check diarrhoea and dyspepsia, to produce sleep, and is said to be aphrodisiac by the native physicians. It has really some power to check diarrhoea and dyspepsia. It produces sleep.

41. (a) Ganja and bhang both in small quantities assist digestion.

(b) Yes; they give power of endurance to fatigue and exertion.

(c) They do not escape malaria. It being a malarial place, I have many opportunities to get patients suffering from malaria among ganja smokers, etc.

(d) Ganja smokers are generally muscular, and so much that ganja smokers can be made out from common men.

42. I do not think their moderate use to be beneficial and necessary. They are not essential for the sustenance of our health and life. We have enough of harmless articles in our food to bear us up under fatigue. Their use should be restricted medicinally only.

44. (b) Yes.

(c) Yes, but not always and in small doses.

(d) Do not know.

(e) Yes; I have seen voracious appetite under its use.

(g) Dullness and somnolence.

(h) Most marked longing and uneasiness.

45. (a) Produces a tendency to take in excess.

(c) No.

(d) Ganja causes dysentery after a long use.

(e) Generally not. Occasionally we meet such cases.

(f) Yes. It is only after a long use. I saw only one case. It is of a permanent type. Temporary type is not rare. A man often forgets of his action under ganja when in sane moments.

46. I have seen some 20 persons who became insane under excessive ganja smoking. Some of them are raving mad. The madness is permanent. They get temporary excitements. Somewhere these excitements were due to the temporary abstinence of the drug and somewhere to their excessive use. In the neighbourhood of my residence a woman of middle class died from dysentery and was a hard ganja smoker. Her one son, a hard ganja smoker, became stark mad, and another son, a very good intelligent man, a few years since has become insane. They keep up intelligence and reasoning power except during excitement, but are incapable to conduct business and to manage their own affairs and cannot be in any way trusted.

47. No.

48. I do not know of any hereditary longing for the drug. In one case the parents were ganja smokers and the boys were also hard smokers and became mad, and I could find no proof that they were hereditary.

49. (a) Yes.

(b) Yes.

(c) They suffer from the ill effects of indulging to an excess.

(d) I know none.

56. As to administration to others, dhatura is often given to produce sleep for the purpose of theft. Bhang and ganja mixed with dhatura is often administered in the country to produce madness.

Oral evidence.

Question 1.—I took the degree of L. M. S. at the Calcutta University in 1880, and was educated in the Calcutta Medical College. I was never in Government service. I have practised in Tangail since 1880, and I am there still.

Question 45.—I have in one case seen that the moderate use produced insanity of a permanent type. The insane I refer to is still living. His father and mother were both ganja smokers and sane, though they were irritable, excitable, and hot-tempered. As far as I could tell, they were quite sane and their excitability was not like insanity. They are a family of zamindar's amlas. It was six years ago that the man was found to be insane, but for three years before that, he had been eccentric. He is now 58 or 59 years old. I cannot say when he began to smoke ganja, but I know he is a ganja smoker for I know the whole household and the persons who used to bring him his ganja. He was a very reliable man of business up to the time he left the zamindar's service about ten years ago. He now smokes in excess. When he began to be insane we discovered that he was smoking to excess. From enquiry, I learned that he smoked moderately before that. I enquired when he became insane what amount he was in the habit of smoking, and his servants and other amlas of the zamindar told me that he was smoking

moderately. I did not enquire what actual quantity he used to smoke. He smoked two or three times a day. I never saw him smoke. Ganja is taken privately. I never attended him professionally, nor do I know that he was ever attended by any medical man. His father died sixteen to eighteen years ago when I was a student in Calcutta. His mother died two or three years after his father before I left college. I remember that she was of an excitable and irritable temper and that all the people of the village used to fear both father and mother. If there had been any other cause for insanity, I should have learnt it for he was my neighbour. I made enquiry in his house about cause to ascertain whether the insanity was from ganja or anything else. The people in the house said it was ganja. I enquired for family troubles, but discovered none. I recollect now that he used to take liquor. I made no further enquiries because his house adjoined mine, and I knew all about him. His caste is Baidya. His brother who is dead was stark mad. My belief is that he went mad from ganja also.

Question 46.—The persons mentioned in this answer were not all of them under my treatment. Two of them only were so. None of these 20 persons went into a lunatic asylum. They belong to different villages, only three, i.e., one besides the two mentioned above, to mine. Of some I only heard that they were insane from ganja smoking. I know the facts personally about five of them, i.e., two besides those in my own village. I have seen more than 60 or 70 insane persons in my profession and ordinary life. Of the three in my village, two are the brothers of whom I have already spoken.

The other two insanes lived in villages at a little distance. One of the latter, a boy living in a village two miles off began smoking ganja at 8 years old. He has been mad nearly four years and he is now 16 years old. He was a bad boy, no doubt. He is still mad and still smokes. I know his family intimately. I cannot say whether there was any hereditary taint or not.

The other man of my village is now 50 years old. He has been mad ever since I can remember. In the village it was stated by all that he had gone mad from ganja, and he still smokes. I cannot say if there was any insanity in his family. I am not very intimately acquainted with the family. I do not know what his habits were before he became insane.

The fifth case is now sane. He lives in a different village. He was mad for six months. I know his family well, and there was no hereditary taint. He did not take liquor. His father and brothers had occupation in my village, so I know all about him. It was fourteen years or so ago that he became mad for six months.

I am in charge of a private dispensary at Tangail. One of the two cases which were under my treatment was that of the lad of 16. He was an outdoor patient. He had syphilitic ulcers in the arms. That indicates unnatural offences. The other man who was under my treatment was the man of 50, who has been mad ever since I can remember. I treated him for asthma. In neither of these cases did I treat the patients for insanity. In fact, I have never treated any case of insanity due to ganja.

151. *Evidence of BIJOYA RATNA SEN*, Kaviranjan, Kabiraj, Calcutta.*

1. Myself being a physician, practising under the system of Ayurvedic School, I am acquainted with the qualities of hemp plants as with the merits of innumerable other medicinal plants and ingredients. Besides that, being acquainted with the customs, manners, etc., of various classes of people and physicians of different schools, and having travelled in many districts in connection with my professional calls, I have also gained some experience in respect of the different kinds of hemp plants and drugs. So my replies are based to a considerable extent on my own experience in connection with my professional attainments.

2. Yes. The definitions may be applied to Bengal. The products are locally known as follows:—Siddhi or bhang, charas and ganja. The latter is sub-divided into three parts, viz., flat, round and chur.

3. Jessore, 24-Parganas, Nadia, and Murshidabad.

In Jessore and 24-Parganas the plants are abundant.

4. It is also known by the different names as follows:—

Bhang, ganja, matulani, traylakya bijaya, madini, jaya, tarita, sambida, etc. These different names are generally applicable to bhang. As, however, there is no separate mention of ganja, some persons believe that ganja is another name of bhang.

6. Scattered.

7. (a) The cultivation of hemp plant for the production of ganja exists in Naogaon Sub-division of the Rajshahi District.

8. There has neither been increase nor decrease in the area under such cultivation, because it is a Government monopoly. Private persons are prohibited from cultivating hemp plant.

10. They belong to same class as the other agricultural cultivators.

11 and 12. No.

13. The cultivation of the hemp plant for ganja is restricted in this province to all the districts of Bengal.

14. Ganja and bhang are prepared in Bengal, in Naogaon Sub-division of the Rajshahi District, but bhang is also prepared in Patna District.

15. Siddhi or bhang, ganja and charas, are the productions of different sorts of plants, but generally of same kind.

The leaves are used as bhang for drinking or eating purposes. Ganja and charas are only smoked. The flowery parts are the best ganja, called chur; the mixture of flowery parts and leaves are made into flat and round ganjas according to different modes of preparation. The glutinous or resinous substances, sometimes naturally and sometimes artificially drawn, are made into charas.

16. Yes. Bhang is generally prepared by the people in their houses. Yes; it can be prepared from the hemp plant wherever grown. I am not aware whether ganja and charas cannot be prepared from the wild plant wherever grown.

17. By common agricultural classes.

18. Yes, the drugs deteriorate by keeping. Yes, it quite loses its effect in time. It keeps good for one year with ordinary care. The cause of its deterioration is exposure. They are kept in tin-lined boxes to prevent deterioration.

19. Ganja and charas are only used for smoking.

20. Lower classes, such as fishermen, cultivators and day labourers (4 to 1).

It is prevalent in dampy and marshy soils.

21. Chur is generally preferred for smoking. Flat and round ganjas are also smoked but not so preferred as they do not produce such effects as the chur.

22. Charas, prepared in Nepal and Punjab, is chiefly used.

23. No.

24. Bhang is drunk by all classes of people in every locality, 50 per cent. in Behar, and less than five per cent. in Bengal.

25. The use of ganja, charas and bhang is on the decrease owing to the increase of its duty.

26. Most are habitual moderate consumers.

27. In Behar, i.e., Upper Bengal, 50 per cent. of both higher and lower classes are in the habit of taking bhang, but in Lower Bengal it is not used to such an extent, rather much less. Ganja and charas are generally taken by lower and labouring classes, but certain people of the higher and gentle classes, being mixed with bad company and following all immoral habits, are also found to use them. These are not, however, generally taken by the gentle class.

28. Half to one anna is sufficient for moderate users. Even excessive consumers cannot take ganja more than 6, 7 or 8 annas worth in a company daily.

29. The following ingredients are mixed with bhang:—

Pepper, salt, souf, rose, cardamom, seeds of cucumber, nut, sugar, milk, etc. Tobacco is mixed with ganja to lessen its severity.

I do not know whether dhatura (nux vomica) and cantharides are generally mixed with bhang or ganja, but I have heard that wicked persons sometimes mix dhatura with these drugs to increase their severity or make them stronger. The ingredients mixed with bhang, as stated above, are known to be sold in the bazar as bhang-massala.

30. About 50 per cent. of the consumption of each of these articles is practised in company. It is mainly confined to the male sex between the age of 20 and 50. It is not consumed by children.

31. Yes; the habit of consuming ganja and bhang is easily formed. It is not difficult to break off. There is no particular tendency for the moderate habit to develop into the excessive.

32. Siddhi is drunk sometimes, i.e., on the occasion of Bijaya, for religious purposes. The use of this drug in connection with such custom is not regarded as essential. It is generally temperate. It is not likely to lead to the formation

* Was invited to attend at a sitting of the Commission for oral examination, but failed to appear.

of the habit or otherwise injurious by use on this occasion only.

33. The consumers of charas and ganja are socially regarded to be low, because these intoxicating drugs are generally looked upon as hated things, for men create a peevish temper by taking ganja and charas.

34. When a person creates a habit of taking these (bhang, ganja or charas) intoxicating drugs, they would certainly feel uneasiness for some time if required to give them up. The want of stimulating effect which acts on them by their use is the cause of this uneasiness.

35. Yes, it is feasible to prohibit the use of all these drugs; for some time it may be illicitly used. The present excise laws are sufficient to enforce this.

The prohibition will certainly create discontent to a certain extent, it will have no connection with politics. The prohibition may be followed by a recourse to alcoholic stimulants or other drugs.

36. Very seldom.

37. Smoking of charas and ganja produces nearly the same effects, but charas is little stronger than ganja.

38. The chur is more acute than flat or round ganja.

39. Siddhi is taken by mixing with water. The eating of ganja and charas by mixing with water must be more injurious than smoking. Smoking acts less injuriously, as by this procedure its severity is lessened and thereby some intoxicating portion is burnt. But if taken by mixing with water, their entire severity acts on the whole system.

40. Only siddhi is used for medicinal purposes by kavirajes.

41. Bhang, if taken in small quantity, creates appetite and increases digestive power. All these (bhang, ganja and charas) give staying-power under severe exertion or exposure and alleviate fatigue. I believe siddhi is preventive of disease in malarious or unhealthy tracts. Monks, peasants, cultivators, and native sailors, etc., use ganja and charas to obtain staying-power under exposure and to alleviate fatigue.

This remark is applicable to moderate consumers only.

42. The moderate use of siddhi is rather harmless. It increases the intellect of the man and does improve the health.

43. Yes.

44. The moderate use of ganja and charas is refreshing. They produce mild intoxication and create appetite. The intoxication of siddhi lasts some hours, but that of ganja or charas for an hour or two. The want of subsequent gratification produces longing and uneasiness, but in certain circumstances the use of ganja causes dysentery and interferes with the action of the lungs and brains.

45. The habitual moderate use of ganja or charas, but not of siddhi, may in some cases produce noxious effects, physically, mentally and morally. It impairs the constitution. It injures the digestive power, and creates dysentery, bronchitis, asthma, etc. It also impairs the moral sense and induces laziness, immorality and debauchery. It may also produce insanity both temporarily and permanently, but such insanity in

most cases may be cured by giving up their use and by proper medical treatment.

The use of these drugs by persons suffering from mental anxiety does not produce good effect, and the use of these drugs by those suffering from brain disease is injurious. The persons deficient in self-control through weakened intellect should not use any intoxicant ingredients as these, as indulgence in the use of hemp drugs by such persons may create many diseases.

46. The habitual excessive use of ganja and charas is generally found to cause all the above diseases.

47. No.

49. They are scarcely used as aphrodisiac, though they may be resorted to as such by infamous characters of the vulgar class. Liquor is the intoxicant in use among a great majority of respectable prostitutes; charas and ganja are consumed by lower classes of prostitutes who can ill afford to pay for liquor. Their (siddhi, ganja and charas) use as aphrodisiac is more injurious than their more common use as intoxicants. For, in cases of fatigue due to severe exertion, their effect is beneficial owing to their stimulating properties, but in a sound state their effect is unwholesome in consequence of the excitement of the entire system.

51. Of course a great majority of moderate habitual consumers of ganja are low and vulgar, though not bad characters. The moderate users of ganja are not generally injurious or criminals.

52. Large portion of bad characters are habitual excessive consumers of ganja. Its excessive use may make a man violent in temper and such a person may possibly be induced to commit crimes of dacoity, rioting or other offences of violence.

53. Sometimes the excessive consumption of ganja and charas may incite to unpremeditated crime, violent or otherwise. No; I do not know of any case.

54. Such cases are very rare.

55. No; complete stupefaction cannot be effected without admixture of other strong ingredients.

56. Ganja and siddhi, moderated by the admixture of other ingredients, remove the fatigue, increase the appetite and stimulate the system of labourers. But the effect is contrary to excessive consumers.

57. I am not acquainted with any process of eating or drinking of ganja and charas.

60. The cultivation of the ganja-bearing plant, and the process of its preparation are, I believe, sufficiently controlled by Government, and, I think, require no modification.

61. Charas is not produced in this province (Bengal).

62. I do not see any necessity for controlling the cultivation of the hemp plant for the production of bhang or siddhi.

68. I am not aware of the establishment of such houses in this province for the preparation and consumption of these drugs, but there are licensed shops for selling these drugs. Such houses, if any, must be for the use of low and vulgar persons of bad characters, who only can resort to them. They are considered by gentle class to be infernal or hellish places.

69. Yes; I think so. If not, it should be done.

I do not know what measures are required to be taken for this purpose. Yes; public opinion ought to be considered.

In conclusion, siddhi or bhang is used generally by up-country or religious people, and its moderate use is beneficial in some respects. Ganja and charas are smoked generally by low class labourers for alleviating fatigue, and obtaining staying-power under severe exertion or exposure and

for refreshing themselves. The excessive use of these drugs, as in the case of other intoxicating ingredients, is very injurious, and they create many wasting diseases, and produce immorality. All these are regarded as addiction to low vices, and those who indulge in ganja and charas are considered to be hated beings, and such persons lose all their respectability in the eyes of sober and good people.

152. *Evidence of GANGA PERSAD SEN, Kaviratna, Kaviraj, Calcutta.*

[The evidence of this witness is exactly the same as that of Bijoya Ratna Sen (No. 151), and is not reprinted.]

153. *Evidence of GOPEE MOHUN ROY, Baidya, Kabiraj, Calcutta.*

1. The opportunities presented before me in obtaining the informations in connection with hemp drugs are from the following sources, *viz.* :—

From my 32 years' experience as a native medical practitioner, from my personal observations, and from local enquiries made on this particular occasion.

2. Yes. The definitions given by Dr. Prain in his report of the hemp drugs may be accepted for the Lower Province of Bengal; and the different products of hemp plant are known here by names of siddhi or bhang, charas and ganja.

19. Ganja and charas are generally used for smoking; but ganja is sometimes washed in water and ground into paste and taken like siddhi. A kind of oil is also prepared with ganja and applied by the people for cure of itch. The two latter forms of use are not restricted to any particular locally.

23. Bhang or siddhi is not used in smoking, so far as I know.

28. To a habitual moderate consumer of ganja, the average allowance is $\frac{3}{4}$ th of a tola, and the cost $1\frac{1}{2}$ anna per diem. To a habitual excessive consumer of the same, the average allowance is $1\frac{1}{4}$ tola, and the cost 5 annas per diem.

To a habitual moderate consumer of charas, the average daily cost is 4 annas. To a habitual excessive consumer of the same, the daily average cost is 7 annas.

29. With ganja dried tobacco leaves are ordinarily mixed by the habitual consumers. In exceptional cases, dhatura is sometimes mixed, as well as opium. The latter practice is sometimes observed with the mendicants in order to heighten the effect of intoxication. With charas, ordinarily no ingredients are mixed except prepared tobacco.

With siddhi the following ingredients are generally mixed, *viz.*, aniseed, black pepper, dried rose buds, milk, sugar, cucumber seeds, etc. The admixtures are known as bhang massala and sold at bazars. As to admixture of other ingredients, such as opium, nux vomica, cantharides, etc., there may be rare cases but not generally used.

30. Ganja, charas and siddhi are practised to a greater extent in company than in solitude. They are mainly confined to the male sex, but not to any particular time of life. Children do not usually consume them.

31. The answers to these questions are all in the affirmative.

32. There is a social or rather religious custom observed in Lower Bengal by all classes of the Hindu community in regard to the consumption of siddhi. It is on the occasion of the fourth day of the Durga Puja, *i.e.*, the Bijaya day, when after the idol has been thrown into river or tank, that people, high and low, assemble together at different places and take siddhi as a matter of religious ceremony. Those who are not accustomed to it, and even the females and children invariably use it in very small quantities on this occasion. It is generally considered as essential, and is temperate. This custom never leads to the formation of the habit, nor is it injurious in any way.

36. I have no reason to think that alcohol is now at all being substituted for any of these drugs. On the other hand, I know several instances of persons addicted to the use of alcohol, who have altogether given it up, and as an alternative, taken to the use of ganja or bhang.

37. The effects of charas smoking differ from those of ganja in the following particulars:—The influence of charas is milder than that of ganja. It, however, produces headache, whereas in ganja no such sensation is produced. The influence of ganja lasts for a longer time than that of charas. The effect of bhang differs from those of ganja and charas in the following points, *viz.* :—The influence of bhang lasts for a longer period than that of ganja. It does not, however, produce headache like charas.

39. The question whether the smoking of any of the preparations of hemp plant is less injurious than drinking or eating the same or any other preparation, is an open one, inasmuch as the latter form of use is rarely resorted to, and consequently its bad effects are scarcely brought to the notice of medical practitioners.

40. Siddhi is often prescribed by native doctors of the Ayurvedic system of treatment for its medicinal properties. Siddhi only is used in cattle disease.

41. (a) Bhang, when moderately used, is beneficial in its effects as a food digestive.

(b) It is also beneficial as a food, giving staying-power, etc.

(c) In some malarious localities, bhang has been moderately and successfully used as a febrifuge or preventive of disease.

(d) It is also found useful in cases of chronic diarrhoea and impotency.

Ganja and charas, when moderately used, have not been found beneficial as digestive, but they have been found beneficial in respect to severe exertion, exposure or fatigue.

42. The moderate use of ganja and charas, even where not beneficial, does no particular harm, because it does not create any organic disorder, mental derangement, or impair the nervous system and the vigour of the body.

44. The immediate effect of the moderate use of ganja and bhang is a pleasant sensation of intoxication accompanied with forgetfulness of worldly cares. It is also refreshing, and creates appetite. The effect of the moderate use of bhang, however, does not allay hunger as it does in the case of ganja. The effect of bhang moderately used lasts for some ten to twelve hours, whereas that of ganja lasts for about two or three hours. In both cases there are no after-effects. The want of subsequent gratification produces longing for it and uneasiness. The moderate use of charas :—Its immediate effect is that the smoker becomes giddy and feels a pleasant sensation of intoxication. It is refreshing. It does not allay hunger, but creates a little appetite, and its effect lasts for about 1½ or 2 hours. It leaves no after-effect and produces a longing or uneasiness for want of subsequent gratification.

45. It does not.

46. The excessive use of ganja and charas produces noxious effects, physical, mental or moral. It impairs the constitution by reducing the body, injures the power of digestion, and causes loss of appetite. It may bring on dysentery, bronchitis, and asthma. It also brings on laziness and habits of immorality. It affects the intellect, and produces temporary insanity of mild type, but not necessarily in all case. In cases that came under my notice, where it has produced temporary

insanity, it appeared to me that the excessive use was the exciting cause. The symptoms of insanity may be reinduced by the fresh use of the drugs. In such insanity there are no typical symptoms. Insanes having no recorded history very rarely confess to the use of the drugs.

But the excessive use of bhang does not produce any of those bad effects enumerated above, except that it brings in a temporary stupor.

47. No.

48. Even the habitual excessive use of the drugs does not appear to be a hereditary habit or that it affects the children.

49. The moderate use of siddhi and ganja is occasionally practised as an aphrodisiac even by the prostitutes. These drugs, when used for such purposes, become more injurious than when used for ordinary purposes, inasmuch as by repeated and constant use of these stimulants for the said purpose, impotency is rather increased. The use of hemp does not necessarily produce impotency.

50. The answer to this question is the same in all its bearings, as stated in answer to question No. 49.

In conclusion, in submitting the answers to some of the questions in connection with the hemp drugs before the Commission, I beg to express the following opinion :—

The moderate consumption of the hemp drugs is not injurious to health, etc., in so far as it can be restrained within limit. But since it has been found that the habitual moderate consumption of these drugs naturally tends towards development into the excessive in time, and since the excessive habitual use of ganja and charas brings in physical and mental disorders, the more the use of these two drugs is restricted, the better.

154. Evidence of PIYARI MOHAN KAVIRAJ, *Vaidya, Native Physician, Calcutta.*

1. As we use siddhi and its seed in medicines prescribed by Aurvedic Sastras, I have ample opportunities of getting experience as to their medical virtue. Moreover, as many persons use siddhi, ganja and charas for intoxicating purposes, I have got certain opportunities of forming an opinion as to their effects.

2. I have no knowledge of the cultivation of siddhi, ganja or charas, because I have never been in those places where they are cultivated. But in some villages of our native district of Jessore, siddhi grows wild, and it is called bhang. This is less stringent than that cultivated or grown in Behar or in the North-Western Provinces. But it also causes intoxication. In our part of the country, it and its seed are used in the preparation of Aurvedic medicines. These products are locally known as siddhi or bhang, ganja and charas.

19. Yes, ganja and charas are generally used for smoking, and they are not used in any other way. But in skin diseases, such as itches, ganja is used as a medicine, boiled with cocoanut oil.

23. It is seldom used for smoking.

28. Very few gentlemen take to ganja-smoking. But lower class labourers take to ganja-smoking to alleviate fatigue, and religious mendicants (sadhus) and sanyasis often take to ganja-smoking and drinking siddhi for devotional purposes. Moreover, inhabitants of the Behar and the North-Western Provinces, as a rule, drink

siddhi daily. Charas-smoking is not very prevalent, somebody taking a chillum or two for the sake of amusements. It has been known that some habitual ganja-smokers smoke twenty to thirty chillums daily. But siddhi is never drunk more than once daily. The cost of a habitual ganja-smoker, say one or two chillums daily, is one or two pice; but the cost of a habitual excessive consumer is one auna to three annas daily. But the number of such consumers is very few. The cost of a habitual siddhi drinker is not more than one pice daily, and in the case of many persons, a pice worth is sufficient for 3 or 4 days' consumption. Charas is not, as far as I am aware, smoked daily, but taken for the sake of amusement. It does not cost more than a pice for each chillum.

29. As far as I have been able to ascertain on enquiry, I am come to know that pepper and clove are ordinarily mixed with siddhi. Some also mix cucumber seed in addition. I have never heard of dhatura, opium, nux vomica, cantharides or betelnut being mixed with any of these drugs for drinking or smoking purposes. But instances have come to my notice of mixing dhatura and opium with siddhi for poisoning. The object of the said admixtures is relishing. Yes, I have heard of bhang massala being sold in the bazar for the purpose of being mixed with bhang, but I know not what its ingredients are.

30. As a rule, each of these three drugs are generally taken in solitude, but they are sometimes also taken in company. It is mostly confined to the male sex and after infancy in some cases, but it is generally taken by adults. Women of the better class never take to the use of these drugs. But I have heard that women of low class, and some low class prostitutes, are addicted to taking these drugs. Some children, say over 10 or 12 years of age, also do take these drugs, but their number is not large.

31. The use of consuming any of these drugs at first begins with bad company, which afterwards forms into a habit. However, it is not difficult to break it off, if the consumer so minds it. When once a habit is formed, there may be a tendency in the case of any of these three drugs for the moderate habit to develop into the excessive.

32. It is a custom amongst the Hindus to drink siddhi on the night of the Bijaya day of the Durga Puja, as is enjoined by the Hindu Sastras. Most people drink it in moderate quantities on that day, and they do never take it afterwards. It is not likely to lead to the formation of the habit, or otherwise injurious.

36. Yes, as far as I have heard, I have reason to believe that alcohol is now being substituted to a certain extent for these drugs. But, as my information is hearsay, I cannot attribute any cause for this change; neither can I cite any proof. I merely state my information for what it is worth.

37. The effects of ganja-smoking and charas-smoking are nearly the same, both being very heating and producing costiveness. A habitual consumer is apt to get dysentery, brain disease; and it may finally bring insanity. They are not used in Aurvedic medicines. The effect of drinking siddhi is also the same, if taken in excessive quantities. But to drink it in mild doses removes looseness of the bowels, and it also serves as an aphrodisiac. The Aurvedic Sastras prescribe the use of it, and its seed in the preparation of the Aurvedic drugs. According to the Aurvedic Sastras, siddhi is heating, digestive, stringent and narcotic. I annex hereto extracts* from the late Dr. Uday Chand Datta's Hindu Materia Medica, in which he has described the various uses which are made of it in the Aurvedic medicines, as well as of the various uses of it and its kindred products, the ganja and the charas as intoxicating agents. Besides the uses mentioned in the said extracts, there are other uses, but these will, I think, suffice for establishing its medical properties.

39. As I have already stated, I have not much experience about the smoking of ganja and charas, but with reference to siddhi, this much I can say that drinking it in moderate doses is less injurious than the smoking of the former.

40. Yes, *vide* my answer to question 37. I do

not know if any of them are used in the treatment of cattle diseases.

41. I have already stated that I have no particular experience of ganja and charas, but I have heard that their smoking gives stimulus to work and alleviates fatigue. But I know that drinking bhang and the medicines prepared with it remove looseness of the bowels and impotency. I do not know whether they are febrifuge or preventive of diseases in malarious and unhealthy tracts.

42. I do not think the moderate use of ganja and charas to be harmless, because it causes costiveness, giddiness and affects the brain. But siddhi and its seed being admixed in an atomic quantity with other ingredients in the Aurvedic medicine, is beneficial.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumer is constipation, astringency, intoxication, exciting appetite. It is refreshing till the intoxication lasts (which lasts for two or three hours), after which reaction sets in, and the result is giddiness, thirst and costiveness. Yes, the want of subsequent gratification produces longing and uneasiness in the case of habitual consumers.

45. Yes; it causes constipation, affects the brain and consequently leads the consumer to commit acts of criminality. Yes; it impairs the constitution. Yes; it injures the digestion and finally causes loss of appetite. Yes; I know it causes dysentery, and I believe, owing to its heating power, it can cause bronchitis or asthma.

Yes; it impairs the moral sense and induces laziness and habits of immorality, as it affects the brain. I have come across several cases in which the excessive use of ganja and siddhi has produced insanity. In those cases it has appeared to me to be both the exciting and the predisposing cause. Insanity produced by it is of the same type as ordinary insanity. In some cases it was temporary, and in others permanent. The symptoms may be re-induced by the use of the drug after liberation or restraint. Yes; persons deficient in self-control, through weak intellect, are most apt to get insanity by the use of hemp drugs.

46. This has been answered along with question 45.

47 and 48. Have no knowledge.

49. Yes; it is practised by some persons as an aphrodisiac. I am told some low class prostitutes use it as such. I do not think its use for this purpose is more injurious than its use as an ordinary narcotic. I do not think it tends to produce impotence.

50. The same answer as against question 49.

56. See my answers with regard to questions 29 and 37.

57. I do not know.

155.—Evidence of BINOD LAL SEN,† *Baidya, Kaviraj, Calcutta.*

1. My humble opinion is based on my experience as a practising physician in Calcutta and its suburbs for the last 25 years, the opportunities I have had in the treatment of patients that were under my treatment, the hemp drugs used by me in my practice, and the various occasions I have

had to consult the several Ayurvedic books in practising, as also in editing certain Ayurvedic treatises.

2. Besides the names applied to the hemp plant, *viz.*, siddhi or bhang, subji or patti, there are several Sanskrit names for the same, *viz.*,

* The extracts alluded to were not forwarded to the Commission.

† Was invited to appear at a meeting of the Commission for oral examination, but failed to appear.

bhanga, patra, matulani, jaya, bijaya, and morasan.

Sambidasar.—It is the juice or decoction of siddhi and ganja, and is prepared from them in the mode in which watery extracts are obtained. When the sambidasar is not obtained for medicinal purposes, charas is substituted.

The Sanskrit names for ganja are sambidamanjari, madiini, harsini, and ugra.

19. Although ganja and charas are invariably used for smoking purposes, yet the Sikhs, whose religious rites do not allow them to smoke, take ganja in the shape of a paste prepared with water.

23. Generally, siddhi or bhang is not used for smoking purposes, but poor, hard ganja-smokers do occasionally use it for smoking purposes when they had not sufficient funds for purchasing ganja, for it occasionally supplies the place of ganja, though mildly.

28. The cost of each of these drugs per diem to habitual moderate consumers is as follows :—

(a) Siddhi $\frac{1}{2}$ anna, ganja $\frac{1}{2}$ anna, and charas $\frac{1}{2}$ anna.

Siddhi 1 anna, ganja 4 annas; and charas 2 annas.

29. (a) Ordinarily no ingredients are mixed with any of these drugs by the consumers.

(b) In exceptional cases the following ingredients are mixed with bhang, called the bhang massala, viz., cucumber seeds, melon seeds, sugar, and aniseed. Dhatura and opium are so used. The object of these admixtures is to increase the intoxicating power of these drugs. These admixtures are generally used by the poorer classes of the consumers, who cannot now afford to pay the higher prices of these drugs.

30. The consumption of siddhi is generally practised in solitude. The consumption of ganja and charas is generally practised in company. It is mainly confined to the male sex. It is not confined to any particular time of life. Only grown-up men use these drugs. It is not usual for children to consume any of these drugs. Prostitutes and Vaisnavis occasionally use these drugs.

31. The habit of consuming these drugs is easily formed in bad company. It is very difficult to break off. There is always a tendency in the case of these drugs for the moderate habit to develop into the excessive.

32. There is a custom amongst the Hindus to consume a moderate quantity of siddhi on the fourth day of the Durga Puja. The use of this drug on this day is regarded as religious. It is generally temperate. It is not likely to lead to the formation of the habit, or otherwise injurious.

36. I have no reason to think that alcohol is now being substituted for any of these drugs. Habitual drunkards of alcohol, in order to break off the habit, resort to the use of these drugs.

37. The effects of charas-smoking are different from those resulting from ganja-smoking. Ganja-consumers generally contract the habit of smoking, and stick to it throughout their lifetime. The use of charas is resorted to for the sake of pleasure. The consumers of this drug find it less difficult to break off than smokers of ganja. The drinking of siddhi in moderate quantity is less injurious than smoking of ganja or charas. Bhang

is used in small doses for medicinal purposes, and in large quantities for intoxication. The effect of ganja-smoking is more injurious than that of charas and drinking of bhang.

39. The smoking of any preparation of the hemp plant is not less injurious than drinking or eating the same or any other preparation. Siddhi, if occasionally or regularly used in small quantities by making it a paste with water, does not produce injurious effect, but ganja so taken does. The constitution is affected by the use of excessive ganja. Cases have occurred in which excessive use of ganja brought on a tendency towards producing insanity.

40. As regards the efficacies of bhang, ganja and charas, as written in shastras, certain slokas are quoted. Siddhi is also used in the preparation of tonic balls for horses, and for cough in cattle.

41. The moderate use of the drugs in cold and malarious countries and marshes and unhealthy tracts is rather beneficial in its effects.

(a) It sharpens the appetite and is digestive.

(b) It alleviates fatigue after exertion.

(c) It is rather preventive of disease in malarious and unhealthy tracts, but not as a febrifuge.

42. Under certain circumstances, the occasional moderate use of any of these drugs is rather harmless in its effect.

44. The immediate effect of the moderate use of the drugs on the habitual consumer is the feeling of immediate relief, as it produces hilarity and slight intoxication. It is refreshing. It does not allay hunger. It creates appetite. The intoxicating effect lasts for about three hours, and then lethargy comes on, and the consumer has a longing, but does not then feel much uneasy without it.

45. The habitual moderate use of any of these drugs does not produce much noxious effects, physical, mental or moral. It does not much impair the constitution. It gradually injures digestion and causes loss of appetite. Occasionally it causes dysentery, bronchitis and asthma.

Habitual moderate use does not impair the moral sense or bring on habits of immorality or debauchery. Habitual moderate use does not deaden the intellect or produce insanity.

46. The excessive use of these drugs brings on insanity and kindred diseases, and deadens the intellect. In my experience, a Brahmin of the name of Harihar, a resident of Orissa, had taken an excessive dose of siddhi on the fourth day of the Durga Puja and ran mad within an hour, and the next day lost the power of speech, and subsequently died of the same disease.

47. The habitual moderate use of any of these drugs does not appear to me to be a hereditary habit or to affect the children of the moderate consumer.

48. The habitual excessive use does not affect the children of the excessive consumer.

49. The moderate use of any of those drugs is occasionally practised as an aphrodisiac. It is so used occasionally by the prostitutes.

50. Various diseases and maladies spring up by the excessive use of these drugs.

56. Dhatura seeds, etc., are mixed with the drugs for the purpose of increasing the intoxicating powers of the drugs.

57. The Sikhs drink ganja and charas in the form of a paste prepared with water, as they are forbidden to smoke.

156. *Evidence* of RAM CHANDER GOPTA, Kabiraj, Barisal, Backergunge District.*

1. So far I know from experience and Ayurveda Sastra.

2. Round ganja is not used in our district; but in some places it is used. In our district we have the use of flat ganja. Ganja is the only name by which it is known here.

3. Hemp plant grows spontaneously in certain places of Dinajpur District and in the tract lying on the banks of the Bhoirab river in the district of Khulna. Ganja is a certain form of bhang, i.e., jata bhang (bhanga flowers coated with resin) is called ganja. Charas is the resin which exudes from ganja. Also preparation of ganja mixed with certain scented substances for the purpose of smoking is termed charas. Charas is produced from ganja. Consequently the cultivation of both ganja and charas is the same.

4. The following are the different terms by which bhang is used in Sastra :—

Bhanga, ganja, matulani (maternal aunt), madini (intoxicant), bijoya, jaya (conqueror). (From Bhab Prokash.)

Troylakya bijoya, (conqueror of the three worlds), siddhisa, siddhi mulika, gyana sambit (knowledge), sambida, syama, bhanga, rasayana, jogada, joginisebya, jogamarga prakashini (guide to holy communion), brahmani, brahma sambhuta (born of the Almighty Father), brahma-nanda prodayini (giver of celestial pleasure), bagdevata (goddess of learning), basakari (subduer of evil propensities), bijoya, bijayaprada (goddess of victory), samadhi-barada (goddess of holy abstraction), agyananasi (destroyer of ignorance). (These 21 names from Acharasara.)

Bhang, ganja, and sabuja are corruptions of the words bhanga, ganja, and shyama.

5. During the rainy season ganja may grow on land one cubit above sea level. Ganja does not grow on saline lands. It is for this reason that hemp plant grows in Rajshahi, but it does not grow in Backergunge. Cultivation is ordinarily necessary for the growth of ganja; but it may grow wild occasionally.

6. Without cultivation wild ganja may grow dense or scattered.

7. There is no cultivation of ganja in the district of Backergunge.

13. There is no cultivation of hemp plant in our district. I do not know what sort of land is fit for the growth of hemp.

14. Ganja, bhang, and charas are not prepared in our district.

18. Without care ganja, bhang, and charas deteriorate, but if carefully kept, i.e., if they be not exposed to damp or water, they may remain good for two or three years. But in my opinion the longer they remain, the weaker they become in the power of intoxication.

19. Ganja and charas are generally used for smoking. People rarely drink ganja like bhang (pounding it with water), or eat it. Those who are in the habit of using jata bhang and are addicted to drinking bhang, have sometimes recourse to ganja drinking for want of bhang.

20. In this district the low class people, such as boatmen, itinerant singers, and labourers, generally smoke ganja. Even among high class

people, some smoke ganja for mere intoxication's sake; but they are considered as men of low habits, owing to their bad tendencies. Charas is not used here. I do not know whether any one uses it.

21. Flat ganja is used in our district.

23. Those who smoke ganja sometimes smoke bhang for want of ganja. Where there is ganja-smoker there is to be found the use of bhang smoking; but to what extent it is used I do not know.

24. In North-Western Provinces and in the district of Cuttack, most of the people, high or low, drink bhang, mixing it with milk and water. Very few chew or eat bhang. In our district bhang is generally used for medicinal purposes.

25. Formerly different classes had different professions, but at present, owing to the development of foreign commerce, restrictions of professions to particular classes have given way. The weavers (tantis and jugis), paper makers and kapalis, etc. (weavers of gunny bags), all these having turned up, boatmen and labourers, etc., have taken to this pernicious habit of ganja smoking in the belief that it alleviates fatigue and refreshes the mind. Most probably this is one of the chief causes for the increased use of ganja in this country; and the association of other people with these excessive ganja-smokers has led to a certain extent to the increase of ganja consumption.

26. Habitual moderate consumers are less in number than habitual excessive consumers. Occasional moderate consumers are fewer than habitual moderate consumers, and the occasional excessive consumers are the fewest of them all.

27. All the above four classes of consumers generally come from the low classes of the people.

29. Some people drink bhang mixed with milk and cocoanut water, gur or sugar, but for want of the above things, a mixture of bhang with water and salt is made. Gur, milk, sugar, etc., are used for the purpose of making the preparation of bhang sweet and more intoxicating. Sometimes ganja is mixed with prepared tobacco for smoking. Probably this is done for lessening the intoxicating power of ganja.

30. Regarding charas I know nothing. Ganja and bhang according to circumstances are consumed in solitude or in company, but to what extent is not known. Males generally use these two drugs. Among females, prostitutes probably use them. There is no limit of age for the use of these drugs, but most of the young and old men use them. They are not consumed by children.

31. The habit of consuming any one of these drugs is easily formed, if the consumers be of bad character. It is very difficult to give up a habit, specially the habit of taking intoxicants. It is a tendency of all the intoxicating drugs to develop the moderate habit into the excessive.

32. It is a social custom in certain places to use a small quantity of bhang after offering it as a sacrifice to goddess Durga on the days of Mahanavami and Bijaya Dasami. So far as religious custom is concerned, bhang is used by the jogis observing the principles of Tantra Sastra, as it is supposed to help them in practising austerities, i.e., the persons having the titles of Dandi, Abudhutatytha, and Paramhansa are generally found to use bhang after purifying it with mantras, and they only know its efficacy

In our common sense, we know nothing more than what is written in our Sastras. *Mrita sanhita* speaks of giving bhang as a sacrificial offer to Siva: Siva is propitiated by the offering of bijaya leaves; it matters little whether they be dry, broken or ground. More virtue can be earned by the offering of a dry leaf than by distributing hoards of jewels. In the Nigama Tatwa also, if any one offers flowers and leaves of bijaya to Siva, he enjoys happiness in this and acquires salvation for the next.

33. People in general speak ill of the use of any of these drugs, unless it be in keeping with the rules of Sastra. To use ganja, bhang, and charas is disreputable, as it alters the man's temper and tells upon his health. I know nothing about the worship of hemp plant, neither do I know of any rule prescribed in the Sastras for such worship.

34. In my opinion it would not be a serious privation for those who consume ganja for the sake of mere intoxication, to forego the use of it. Of course they may be uneasy for a period, but if the use of ganja be gradually given up, there is no fear of uneasiness. But it would be a serious privation on the part of those who use ganja and bhang moderately for devotional purposes. I cannot speak as to the probable number of them.

35. In my opinion it is feasible to prohibit the free use of these drugs, as they are not generally used according to the dictates of Sastras. Government may prohibit the consumption in any way it likes. The prohibition may at first occasion discontent among consumers, but in the long run, when the habit of hankering after this drug is weakened, it will prove to be a source of good. Therefore this immediate discontent, when followed by future contentment, may not prove injurious to Government, and there is no fear of political danger from the class of consumers of these drugs against the rules of Sastra. This prohibition may cause a small number of excessive consumers of these drugs to have recourse to some other stimulants or drugs. But it may not be the case, as the intoxicating power of different drugs is different.

36. I have not seen whether alcohol is now to a certain extent being substituted for any of these drugs, nor do I find any special reason for thinking this to be so. I have said above that unless the intoxicating power of different drugs be different, why should a man be addicted to the use of all these drugs and alcohol as well. If the effect of any one of these drugs and alcohol had been the same, he might have been satisfied with the use of any one of them.

Hence it is evident that these drugs and spirits have their separate effect each.

So I cannot say whether the decrease of ganja consumption will occasion any increase in the consumption of spirit. But it is not impossible for a man of bad character to have recourse to any intoxicant.

37. The effects of charas and ganja smoking are supposed to be different, because charas is stronger in its effect than ganja. But I cannot tell the exact difference between them.

38. What different effects these different drugs (*viz.*, round and flat ganja and charas) have upon their consumers, I cannot say.

40. The drug designated as bhang is used by the native physicians in preparing their pills, modak pills (digestive pills) and oil, etc. I have never read any treatise on cattle disease, but have heard that bhang is sometimes used in treatment of cattle diseases.

41. I am not acquainted with the use of charas. The qualities of bhang as prescribed in the Ayurveda-Sastra are given below:—Curer of phlegm, it tastes bitter and is retentive, increases appetite, pungent, light, *i.e.*, easily digested, and intoxicating. (From Bhab Prokash.)

Bhang is pungent and increases appetite, cures leprosy, restorer of vigour and intellect, curer of phlegm, possesses properties of bettering the general health, is received for human benefit, equivalent to nectar of ancient time produced by the churning of the ocean with Mount Mandara, giver of victory, and is favourite of Indra, the King of gods, destroyer of fear, giver of pleasure, and generator of carnal appetites. (From Rajaballava.)

Though these qualities are written in Sastra, bhang produces good effects when used according to the instructions of the experienced physician conversant with the principles of Sastra; otherwise not. Consequently I think that bhang has digestive power as it increases appetite, and it relieves fatigue as it gives pleasure when taken.

42. The moderate use of bhang as prescribed in the Sastra may be harmless.

43. Moderate consumers who use bhang in obedience to the biddings of Sastra may be inoffensive to their neighbours.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumers is as follows: it refreshes or lessens fatigue, produces intoxication, does not allay hunger, but creates appetite.

Its effect lasts for an hour or two. They only who use it know its after-effects. Want of subsequent gratification produces longing and uneasiness on the part of the habitual consumers.

45. In my opinion, even the moderate use of any of these drugs, not according to the rules of Sastra, is injurious in its effects. Short descriptions of the consumption of any of these drugs, in keeping with the rules of Sastra, have been given in answer to the questions Nos. 32, 33 and 34. According to Ayurveda Sastra, smoking of these drugs causes bronchitis and asthma. The drinking of bhang or its use in medicinal pills cures dysentery. All intoxicants produce habits of debauchery and impair moral sense. Its use according to Sastra does not deaden intellect.

46. I have seen that the excessive use of any of these drugs against the rules of Sastra impairs intellect and produces permanent insanity. Consequently there is no doubt that it causes temporary madness. Temporary insanity may be recurrent by the repeated use of this drug. The forms of insanity being numerous I refrain from dwelling on them. I do not know whether those who do not know the use of ganja will agree to the use of it or not.

49. The use of any of these drugs to a little extent may act as an aphrodisiac. Many of the prostitutes use it. No power of causing impotence is found in it.

50. The faults of its excessive use have been described in answer to question No. 46.

157. Evidence of BRAHAM DEO NARAIN MISRA, Vaid, Arrah.

1. I have had information regarding the matters connected with hemp drugs from the following sources :—

- (1) Dranyagun, Nighantoo, Raj Nighantoo, Bhana Prakash, and Chorak (books of authority of Sanskrit Medical Science).
- (2) From the talk I held with habitual ganja-smokers.
- (3) Examination of persons suffering from diseases which had their origin in ganja smoking or otherwise and who were habitual ganja-smokers.

2. The observation of Dr. Prain that from the hemp plant three narcotic articles are obtained, viz., ganja, charas and bhang, is quite correct. But I differ from him, inasmuch as he observes that ganja (smoking ganja) consists of the dried flowering tops of the cultivated female hemp plants.

In Bengal there is no ganja (smoking) which grows without seed, rather we see that a great deal of seed is found in all ganjas and bhangs. The ganja which is manufactured here, by being trodden under foot, the agglutinated flower tops of which assume a flattened shape, called by Dr. Prain "flat ganja," is known here as "jatta." The round ganja of Dr. Prain is called here *callee*, but it is not manufactured by rolling under foot, as he says; rather a bundle of the flowering tops is tied lightly and is thrown at random, and when dried it assumes a round or blossom-like shape.

The broken ganja of Dr. Prain is called *chur* in this part of the province.

19. In this province charas is used only for smoking purposes. But with the ganja the case is quite different. Sometimes persons who are habitual bhang takers, when in want of it, take ganja, making it into liquid form. Sometimes it is roasted in ghee, and thereafter the ghee is squeezed out of it, and mixing it with sugar and dry Kabul fruits, a preparation is thus made known as *majum*, and taken by persons who are in the habit of ganja smoking or bhang taking.

23. Yes. Bhang is used for smoking purpose, but to a very limited extent. It is so used only by those persons who are hard ganja-smokers and have become needy, or have run short of it; such persons are mostly found among the villagers.

28. The average cost of habitual moderate ganja-smoker may be from one anna to two annas per diem, and that of an excessive consumer may be from four annas to a rupee. The average allowance of a moderate bhang taker may be from one pice to half anna, and that of an excessive consumer may be from one anna to two annas. The average cost of a moderate charas-smoker may be from half anna to one anna and that of an excessive consumer may be from two annas to four annas per diem.

The above refers to where the consumer is a single individual. But there are persons who for the sake of amusement or attachment collect a number of friends who are of the same habit, and in such case the expense is very excessive.

29. In this part of the country different classes of consumers ordinarily mix with the ganja dry tobacco leaves, or along with it tobacco stuff, and exceptionally there are persons among the consumers who mix leaves of rose flowers or rose

attar or opium or kundoo (the root of betel plant). Nothing is mixed with the charas ordinarily or exceptionally except smoking tobacco stuff. Bhang consumers mix with this drug ordinarily sugar, seeds of melon and cucumber, dry leaves of rose flower, cardamom, aniseed, kabab chini (a kind of spice), and exceptionally dhatura seed and karejui are mixed with it (these are too very very heating and stimulating drugs obtained from the plants so named). In this part of the country dhatura, opium, nux vomica, cantharides, or betel-nut is never mixed with ganja or charas, except dhatura, which is exceptionally mixed with bhang. Ordinarily, people mix with the ganja dry tobacco leaves or smoking tobacco to prevent certain diseases, such as asthma or consumption, and exceptionally dhatura seeds, etc., in order to get easily affected or intoxicated. The ingredients which are ordinarily mixed with the bhang are so used in order to have a cooling effect upon the system. Dhatura is exceptionally mixed with bhang in order to increase simply the intoxicating effect of the drug. Nothing is sold, such as bhang massala, to be mixed with ganja or charas. Certainly bhang massala is sold for being mixed with bhang, and its ingredients are the same which, as stated above, are ordinarily mixed with bhang by the consumers.

30. The answer to the first part of this question is to be found in what I have stated with reference to question No. 28. Generally the use of these drugs is with the male sex. There may be women of loose character who may be in the habit of using these drugs. The use of these drugs is not confined to any time of life, but generally children are not allowed to get addicted to it. There may be, and there are, children uncared for, or having none to take care of who have caught the contagion by moving into bad societies.

31. The habit of consuming any of these drugs is very easily formed. They are tempting devils. Temptation is very strong. One day's use produces a craving on the next day. It is not difficult to break off this habit. Of course the man may feel uneasiness for two or three days while struggling to break through the trammels of the use of these noxious drugs. There is a tendency in the case of each of these drugs for the moderate habit to develop into the excessive.

32. There is no social or religious custom which enjoins the consumption of any of these drugs. Rather every sect of Hindu religion prohibits the use of any of these intoxicating drugs. Certainly there are persons who in the name of religion, for their personal gratification, use these drugs and persuade others to do the same, especially among ignorant class of people. Such people are generally to be found among the fakirs or sadhus, who, in reality knaves, attach much religious importance to themselves and never shrink from doing any sort of mischief. As any of these drugs are not allowed to be used in any religious or social custom, it is beyond my sphere to say whether they are used temperately or excessively. Regarding ordinary consumers who attach no social or religious importance to it I have sufficiently answered in question Nos. 29 and 30.

36. If alcohol means anything but wine, it is unreasonable to think that these drugs are substituted by it, because the alcohol is more expensive than any of these drugs, and the country is

becoming poor. Among lower classes there are persons who, previously though in the habit of using these drugs, have become addicted to alcohol on account of their sudden rise to affluence in the scale of society. The use of wine is a better luxury, though medically never less injurious than any of these drugs, but people who are addicted to the use of these drugs never dream to use wine on account of their poverty. Most probably the habit of using these drugs spread among the people during the Muhammadan rule not on account of poverty of the people, but simply because the Muhammadan government, good or bad, prohibited the manufacture and use of it, except in very very exceptional and rare cases.

Be it known that among the thirty-five crores of Hindu population, if there might be one crore people who are in the habit of using any of these drugs, there might be more than forty lakhs who cannot even touch alcohol on account of religious prohibition.

37. Charas is not so very injurious to the system as the ganja. Certainly it affects the brain like ganja. But in a different way. It produces a sort of dryness in the brain, but never produces dizziness in it. It heats the blood, but does not produce any drying effect; whereas the ganja affects the whole system, and specially the brain, in a very injurious way. It melts the brain matter and heats it to a degree which is a first step to insanity. It soaks the blood and makes it impure. It affects the liver, bowels, and the heart so much so that it opens an easy path to lots of diseases. The consumer becomes languid, peevish and destitute of any power of reason in case of excessive use. Insanity follows, and premature death is the ultimatum. Bhang is less injurious than ganja and charas. It affects the brain to some extent, but it produces constipation and a sort of heat where bhang massala is not mixed with it. Certainly it deranges the bowels.

38. The smoking of a preparation of the hemp plant, far from being less injurious than drinking or eating the same, is more injurious as is found by observation and close study of the consuming system, as is prevalent in this part of the country. The reasons are very clear. In smoking, the smoke ascends up to the brain and affects it, so that the smoker is always in danger; rather in ninety-five cases out of a hundred it proves to be the fact that he is attacked by any of the following diseases:—Paralysis, sukta, melancholia, mirgi (a sort of fit), insanity and other brain diseases. The smoking habit as well affects the lungs, the bowels, the liver and the heart, and thus opens an easy path for asthma, bronchitis, hooping cough, piles, dysentery, etc. It soaks the blood, and it produces dryness and heat in the system to the highest degree. The consumer becomes emaciated, and death is the ultimatum. These facts daily happen, and whatever we have found in Sanskrit medical books, such as Dranyagun, is testified.

40. Native doctors (hakims and vaidyas) prescribe (but in rare cases) bhang in piles cases and sometimes also in fomentation. Sometimes it is used in pasting when the pain is in bones of the several joints of the body. Ganja is often given to the cattle along with gur (raw sugar), dry ginger in aphra disease (a kind of stomach disease common among the cattle).

41. Bhang produces a sort of—

(a) false appetite in those who are its new

devotees, but after a lapse of time the digestive power becomes weakened and the consumer loses his appetite.

- (b) while the consumer is in intoxicated state he will feel very little fatigue in exertions.
- (c) it is not preventive of any disease in malarious or unhealthy tracts.
- (d) except in the diseases mentioned in 40 it is not beneficial in any other way. Ganja and charas are very injurious drugs, and are never beneficial in any way to human beings.

42. The ganja cannot be beneficial even if moderately used. It dries the blood, and the consumer becomes weak and languid, and he is always in danger of being attacked by asthma, bronchitis, and insanity. Bhang is not as injurious as the ganja; still it is injurious, inasmuch as it produces bowel diseases. Charas dries the blood even if moderately taken and weakens the appetite.

44. The immediate effect of ganja is that the consumer gets intoxicated at once, even before the smoke gets out of the mouth. The immediate effect of the charas is the same as that of the ganja. The consumer of bhang is not affected immediately. None of these drugs is refreshing. They all produce intoxication. None of these drugs produces appetite, rather the appetite is lessened. The effect of these drugs lasts for three hours. The after-effect is that the consumer gets dizziness and becomes lazy, and a craving is produced for it. The want of subsequent gratification produces longing and uneasiness of a better kind, and the man does not feel sleep for two or three days if not gratified.

45. Even the habitual moderate use of these drugs produces noxious effects, both physical and mental, as has been observed sufficiently above. The use of these drugs is common among the lower classes of people of this part of the country. Certainly this noxious habit, to a very limited extent, is observed among the higher classes of people as well. Upon such people they have very very little demoralizing effect, as mostly they are well brought up and have social connection and regards, which prove as protective against any demoralizing effect. The case is quite different with the lower classes of people. Moral is affected by the contagion of bad societies. It is natural with the consumers of these drugs to associate with one another and thus form a society, ignorance being the moving spirit and poverty constant attendant, when the brain becomes weakened by the constant use of them and poverty cannot withstand the tempting call of these devils (drugs). It is very natural that the members must have tendency towards immoral actions. The consumer of any of these drugs becomes emaciated and languid if not properly fed. Even the moderate consumer loses his appetite, and power of digestion is gone to a considerable extent. The answer of paragraph 5 of the question has been sufficiently given in the first paragraph. It muddles the brain and makes the intellect blunt, and in certain cases produces insanity. I have treated cases of insanity produced by these drugs, and I have ascertained to my best abilities that there has been no other predisposing cause of insanity. The insanity produced by these drugs is mostly of a permanent nature. In cases of temporary insanity the use of the drug after liberation from restraint calls up the symptoms again. The typical symptoms of

the insanity produced by ganja are the following:—

(a) The patient makes much noise and asks for ganja every now and then. (b) Secretion of tears passes out of the eyes. (c) Becomes a man hater and peevish. (d) Feels less sleep than one whose cause of insanity is something else. (e) The lips get dry.

46. From what has been observed above, sufficient answer has been given to this question.

47. It is not necessary that a person whose ancestors were moderate consumers must get this habit. The habit is not hereditary, rather it has been observed that children of consumers of these drugs have grown into temperance observing young men.

The children of a moderate consumer even are mostly lean and weak.

48. The habit of excessive use of these drugs is not hereditary, but the children of excessive consumers are weaker than those of the moderate consumers, and their complexion is mostly very dark.

49. There are persons who use these drugs as an aphrodisiac, and such people are of vicious habits and of bad morals. The habitual consumers do not use it for that purpose. Prostitutes often use it for that purpose. The use for that purpose is more injurious than ordinary use. The reason is clear. The semen becomes dry and heated, and by much exertion the principal nerves of the organ become loosened, and the person gradually becomes impotent. Besides such persons become devoid of energy and health very soon.

50. The difference between the excessive use and the moderate use from the standpoint of injury regarding the practice as an aphrodisiac is this, that the excessive use is at least five times more injurious than the moderate use.

56. The answer of this question has been sufficiently given above.

57. The answer to the first part of the question has been given above. Ganja sometimes has caused instant death. I have personally observed two or three persons dying instantly after one

hard pull of smoke. It has come into my observation that once a person smoked ganja and became senseless, no medicine could produce any effect. At last a sharp pointed needle was probed into the skull, and a volume of smoke blew out and the man came to his senses. I have treated patients who got the following affections on account of ganja smoking:—

(a) Passing of blood from nostrils. (b) Convulsion. (c) Contraction of the eye-balls.

Oral evidence.

Question 1.—I have never attended any medical college, but was trained in the Baidack system at Benares. I am 33 years old, and have been practising five or six years.

Question 45.—There have been four or five cases of insanity treated by me. One or two would occur in a year. The last was eight or ten months ago. The duration would be one month or two or three months. Besides these one or two remained for a day or two and went off uncured. But the four or five men whom I treated were treated for periods varying from one to three months and were all cured. They were in their own houses, but were under restraint. I visited them. I treated them with cooling applications to the head and the exhibition of cooling draughts. The ganja was stopped. Without that cure would have been impossible. I have had no experience of any case of a permanent nature. All were cured; and my belief therefore is that the insanity due to ganja is of quite a temporary character.

I do not give hemp for cases in which the brain appears affected; but I do give it for colds in the head. I do not know whether people troubled in brain take it for relief. In my books there is no special mention of treatment of diseases due to ganja and bhang; but there is mention of diseases due to intoxicants. Dr. Flood Murray asked me to show him cases of insanity due to hemp drugs. I could not. But I said I had two cases of asthma, and I showed them to him.

158. Evidence of MADHAB K. DAS, Kayasth, Private Practitioner, Calcutta.

1. Having treated several patients suffering from bowel complaints I have had opportunities of obtaining information of the hemp drugs. Besides treating patients as a medical practitioner I gathered information from persons who are regular long-standing ganja-smokers.

2. The definitions of the three varieties of ganja, viz., ganja, charas, and bhang, as given in question 2, are universally accepted, though some are alternatively known by different names in different localities. Thus flat ganja is known in Calcutta and in its vicinity by the name of baluchar ganja, and round ganja by the name of Jessore ganja. As to quality, habitual smokers say that round ganja is more closely adherent than the flat one. Chur or broken ganja is locally known by the name of rora ganja or mohini buti.

19. Ganja is used sometimes with siddhi as a drink to increase the action of the latter drug. It is applied as a remedy for itches, being boiled with mustard oil. In particular cases smokers take to swallowing ganja to have the action of smoking.

23. In absence of ganja, smokers sometimes smoke siddhi, though with less effect. This recourse is adopted very rarely and by low class of men.

28. (a) A habitual moderate ganja-smoker is satisfied with two chillums daily, and the daily cost would be six pies only. A siddhi drinker is satisfied with a pie worth of it.

(b) But a habitual excessive ganja-smoker is satisfied with not less than twenty chillums; and the daily cost would be five annas or more. Excessive siddhi drinkers are very rare.

Charas-smoking now-a-days is also rare.

29. Ganja is ordinarily used by smokers with a bit of tobacco leaf. But exceptionally it is mixed with dhatura, opium, nux vomica, cantharides, and yellow arsenic to make the action more strong. Such admixtures are generally had recourse to by inveterate smokers, such as Hindu ascetics and others.

The ingredients of the bhang massala, as sold in the bazar, are simple things to make the preparation cool. These are black-pepper, cucumber,

seeds, poppy seeds, aniseed, and rose petals. To make it rich some use milk or curd, almond, rose water, and such other things. Soot makes the preparation strong to the extreme.

30. The consumption of these drugs rarely, if at all, is practised in solitude. Females also very freely take to these drugs. The use is not confined to any time of life, neither is it usual for children to consume any of these drugs.

31. The habit is not easily formed; but when once formed cannot be easily broken off unless another intoxicating drug is had recourse to. No tendency for excess is observed in moderate consumers.

32. The custom of drinking bhang on the Dasahara day is observed as a religious rite. Ravan, the demon god of Ceylon, was killed on that day, and Ram, the conqueror, with his monkey troops, celebrated the victory with this drink. Ganja and bhang are copiously used on the occasion of Sivratri and Charak and all other celebration of the god Siva. But the use of these drugs is not reckoned as essential to any form of religion, as an abstainer can equally join the worship. But such observances cannot possibly lead to the formation of the habit, though unaccustomed drinkers or smokers may suffer for the time being.

36. I have no reason to think that alcohol is now being to a certain extent substituted for any of these drugs. On the contrary, alcohol drinkers are seen to advert to these drugs.

37. The effects of ganja can by no means be compared with those of charas. Charas is for beginners and ganja for adepts. The effects of bhang, though it takes time to take effect, are lasting; so much so, that sometimes it continues for two or more days.

39. Smoking any preparation of the hemp is obviously more injurious than eating or drinking the same. The reasons that can be assigned to this effect are (a) that the smoke is irritating, and consequently may bring on dysentery by its action on the mucous membrane of the alimentary canal; (b) that by irritating the mucous membrane of the respiratory passages it may cause bronchitis and asthma. The smoke that gets ingress into the lungs enters the pulmonary blood, and thence it goes into the brain, irritates it, and hence causes a rush of blood into the same. The man suffers from the effects of congestion, such as delirium, etc., and thus there is a tendency towards insanity, the vessels of the brain remaining in a constant state of turgescence.

40. Siddhi and ganja are prescribed for their medicinal properties by native doctors. Siddhi in small doses is used for diarrhoea. In hot weather siddhi is administered to horses as a refrigerant.

41. To persons addicted to the use of these drugs—

- (a) it may be of use as a food accessory or digestive;
- (b) it may give staying-power under severe exertion or exposure or may alleviate fatigue;
- (c) but it is doubtful whether it is a febrifuge or preventive of disease in malarious and unhealthy tracts;

42. I do not consider the moderate use of these drugs to be harmless. Moderate use may engender a habit.

44. The moderate use of these drugs is refreshing to habitual consumers; but properly speaking it does not produce intoxication. It makes one unconscious of hunger, though not actually allaying it; on the contrary it creates appetite. The effects may last for more or less two hours. As to after-effects it produces thirst, hunger, etc., and the want of subsequent gratification produces longing and uneasiness.

45. The habitual moderate smokers may become physically, mentally, and morally weak.

It may impair the constitution.

It does not injure the digestion, nor cause loss of appetite.

It may cause dysentery, bronchitis, or asthma.

It may impair the moral sense or induce laziness or habits of immorality or debauchery.

It may deaden the intellect and produce insanity. I think it is the exciting cause in some cases. In one case at least I can very strongly say that ganja smoking was the sole exciting cause of insanity. This insanity is generally of a violent character and of a permanent character. When temporary, which is very rare, it is re-induced by smoking again. Insanes that have become so by ganja smoking are violent, raving, etc. Such insanes confess that their insanity was the effects of ganja smoking.

I am not of opinion that persons suffering from mental anxiety or brain disease may get relief by ganja smoking. I think that persons deficient in self-control through weakened brain, having indulged in hemp smoking, turn insanes. I know of a man who, not having sufficient self-controlling power, was occasionally in the habit of smoking ganja. At last he became a regular smoker and turned insane.

46. The habitual excessive use of any of these drugs produces comparatively worse results, physical, mental, or moral.

47. Such habits, in my opinion, can never be hereditary.

48. In this case, too, the habit does not go down from father to son.

49. The moderate use is practised as an aphrodisiac by prostitutes. The effects of ganja smoking are the same, whether used this way or the other. Long-standing habit may produce impotence.

50. The excessive use of any of these drugs produces comparatively worse results.

56. Ganja is mixed with other substances either to increase or diminish its effects. Dhatura, nuxvomica, cantharides, opium, or betel-nut makes the composition stronger. There is a preparation made of powdered ganja and boiled opium. The paste is formed into small pills known by the name of grape-shot. These produce graver effects than ganja or opium taken separately.

57. Ganja is sometimes eaten solid or drunk like siddhi, but charas never.

57 a. In my experience as a private practitioner I have very often come across with patients suffering from the effects of ganja smoking, who have almost invariably succumbed at last.

Oral Evidence.

Question 1.—I took my degree of L. M. and S. in 1880. I have never been in Government service, but have practised as a general practitioner since. I have not studied insanity specially, nor have I special experience in regard to insanity.

Question 45.—It is the excessive use that deadens the intellect and produces insanity. The habitual moderate use has not these effects.

The one case I give is a case of excessive use. By saying that ganja was the "sole exciting cause," I mean that there was no other cause whatsoever. I treated the case for four or five months. The man was not cured. He was then removed from Calcutta. It was four or five years ago. He was a Birbhum man, and was about 24 or 25 years old. I did not know him until he was brought to me. But I had seen him before several times when he came as a visitor to his uncle in Calcutta, whose family I attended. I did not know the youth's own family before he came down here. He told me he had indulged in ganja for three or four months only. He was a lunatic when he told me. I ascertained nothing about his habits of life, because I had no idea then that I should be called here as a witness. I cannot say whether he had indulged in drink or in excessive sexual inter-

course. I cannot say whether any of his relations were insane. I say that ganja was the sole cause because he was quite sane when I previously saw him visiting at his uncle's, and because he smoked to excess. He told me that he smoked "often," and therefore I concluded that it was to excess. This is the only case of insanity of any kind that I have ever had under treatment. So all my remarks about ganja insanity are based on my experience of this case.

I know that there may be a hereditary predisposition to insanity; that is, that a man may be sane up till a certain period of his life and then become insane simply because his father was insane. In this case I made no inquiries as to cause, because it would not have affected my treatment of the case; I did not expect at that time that I should ever be asked about the cause. In this case I know that the father and mother were sane when they came down to take away their son.

159. *Evidence of the HON'BLE THE MAHARAJA OF GIDHOUR.*

1. Very few.
2. Yes, by the same name.
4. *Vide* answer to question 2.
7. No.
13. *Vide* answer to question 7.
16. Generally purchased from licensed vendors.
19. Yes, as far as known.
20. The lower classes use ganja. Bhang is used by many Brahmins in Benares, Muttra, and Deoghur.
21. Only the flat sort is known here.
22. Charas is not used here.
25. It is believed that ganja smoking is on the increase, reasons not known.

40. Yes, sometimes.

41. It is the popular belief that it is so.

44. The popular belief is that ganja and bhang are intoxicating; they create appetite and are refreshing. The effects last with ganja about one hour and with bhang about six hours.

58. Yes; it needs no improvement.

68. Yes; they are carried on in a quiet manner.

69. No. None. Yes; local option should be put in force.

N.B.—Where unacquainted with the information sought, I have refrained from answering, leaving the spaces blank.

160. *Evidence of RAJA PEARY MOHUN MUKERJI, C.S.I., Zamindar, Uttarpara, Hughli.*

1. As a landholder who has opportunities of getting information regarding the extent and effect of the use of hemp by people in my estates, and as an amateur homœopathic practitioner who has frequently used hemp as a remedial agent and watched the evil effects of its excessive use for the purpose of administering antidotes.

2. Dr. Prain's definition of the drugs and the names given by him may be accepted as correct. The drugs are known in and about Calcutta as siddhi or bhang, charas and ganja.

3. The hemp plant grows abundantly in Rajshahi, Dinajpur, Bogra, Tippera, Bharatpur, Mirzapur, Ghazipur, and other districts.

Although quite uncared for, the plant grows wild in all places in Lower Bengal, wherever the seeds have been thrown by those who do not care to eat them with the leaves.

4. In and about Calcutta the plant is known as siddhi, and the leaves as sabji or bhang.

5. It easily strikes one that a damp soil is favourable to the growth of the plant. In places where the soil is laterite, stray plants are not so common in Lower Bengal as in moist alluvial soils.

6. The plant grows well both densely and scattered.

7. In the district of Rajshahi hemp is cultivated for all the purposes mentioned in this question. Nowhere else in Bengal is it so largely cultivated.

10. My information is that cultivators of hemp do not form a special class.

14. All the products of hemp are prepared in the district of Rajshahi.

15. Sir William O'Shaughnessy's description of the process for making the preparations for smoking, eating, and drinking appear to me to be fairly correct. The quantities used at a time are, however, much smaller in Bengal than what are mentioned by him.

16. Bhang is usually prepared by the people in their own houses. The leaves of plant wherever grown can be used for the purpose. Ganja and charas, however, cannot be prepared from the wild plant wherever grown.

18. All the three drugs deteriorate by keeping for more than about six months. They become mildewed, and lose not only their flavour, but also their active properties. Preservation in well-stoppered bottles and exposing them to the sun for several hours from time to time prevents deterioration.

19. Ganja and charas are used only for smoking.

20. Palki bearers, diggers of earth, night watchmen, fishermen, sanyasis, and other people following occupations involving hard manual labour or exposure to inclemencies of the weather, are more given to smoking ganja than people in other occupations of life. Better classes of people sometimes contract the habit of smoking ganja, but their number is less than one in a thousand of low class smokers. Among well-to-do men the habit is less prevalent in Lower Bengal than in Behar.

Charas is rarely smoked by low class men. It is too expensive for them. Even among the better classes the use of charas is diminishing.

21. The round variety of ganja is the one usually used.

23. I am not aware of bhang being ever used for smoking.

24. Bhang is mostly eaten and drunk by up-country people. In Lower Bengal the largest proportion of consumers consist of sanyasis, up-country traders, and darwans. Among the people themselves in Lower Bengal the proportion does not exceed one in five thousand.

25. The use of charas is certainly on the decrease. It is difficult to say whether the use of ganja and bhang is decreasing. Those who have suffered by the use of spirituous liquors, or are unable to pay for it, find in ganja and bhang a cheap and less harmful substitute.

28. The quantity of bhang used by moderate consumers does not exceed two tolas per day. On an average half a tola is the ordinary allowance. An excessive consumer would eat so much as four tolas a day. A moderate allowance of ganja is a quarter tola a day. The outside limit for hard smokers is one tola a day.

30. In Lower Bengal ganja and charas are rarely smoked by women or children. Women suffering from chronic bowel complaints have recourse to the use of bhang or opium when other remedies prove ineffectual.

31. The habit of consuming either ganja or charas is not easily formed. The use of either is always repulsive in the beginning, but after the habit has been formed it is difficult to break off; not, however, so much as to break off a habit of drinking liquors. The habit of eating bhang is comparatively more easily formed, but it is one which can be given up much more easily than either ganja or charas. There is no tendency in the case of any of these drugs for a moderate habit running into excess.

32. The only custom which affects the use of these drugs is the one for the use of bhang on the Bejoya day after the Durga Thakur has been thrown down into the water. The custom is quite harmless. It is generally believed to be essential, but bhang is never used in excess on the occasion, and it never leads to the formation of a habit.

33. The habitual use of any of the drugs has been always looked upon with disfavour. The consumers are generally regarded as men liable to be easily irritated, and therefore men to be cautiously dealt with and not to be lightly offended.

34. It would be a serious privation to several classes of consumers if they were forced to forego the use of the drugs. Persons suffering from chronic bowel complaints or want of appetite, for instance, would be deprived of a valuable remedy if they were prevented from taking their daily allowance of bhang; persons who have to work in the sun, keep up nights, or undergo hard manual

labour would be deprived not only of a valuable refreshment, but what must be regarded a necessity of life to men of their occupation, if they were prevented from smoking their usual dose of ganja.

35. A compulsory prohibition of the use of the drugs would cause great misery to the consumers and make them seriously discontented. The number of consumers is not large enough to justify any apprehension of political danger; but it would be wrong to create such discontent and to deprive a large number of peaceful men and useful members of society of their short spells of enjoyment amid the labours, cares, and anxieties of life. It would be a tyranny of the majority over the minority. The use of the drugs is so great a necessity to them that it would be practically impossible to prohibit their use. There would be illicit consumption to a large extent, and the very prohibition would perhaps stimulate persons who would have otherwise kept aloof to take to the use of the drugs. Hemp is used by a large number of men who shun alcohol on religious and social grounds, and who would never use it as a substitute for hemp.

36. Far from alcohol being used as a substitute for hemp, people readily use hemp as a substitute for alcohol. It is cheaper, and is believed to be not so injurious to health and ruinous to the individuals.

39. Smoking ganja and charas is generally believed to be more injurious than eating and drinking bhang. Smoking has a stronger effect, and is more liable to lead to excess than eating bhang.

40. Both bhang and ganja are prescribed on account of their medicinal qualities. They form ingredients of several well-known and standard medicines in Hindu pharmacy. Bhang is also used in the treatment of cattle disease.

41. Both bhang and ganja possess valuable properties. Both of them are appetisers; bhang is beneficial in cases of chronic diarrhoea; both afford refreshment under severe exertion, exposure, and fatigue; and all the three drugs are used as valuable aphrodisiacs. The classes of men who usually use ganja and bhang for getting staying-power are mentioned in answer 20. For medicinal purposes bhang and ganja are used by men of all classes of the community.

42. The moderate use of ganja and bhang is not only harmless, but positively beneficial to the classes of men mentioned in answer 20.

43. Excepting that consumers of bhang and ganja are liable to be more easily offended than others, they are, generally speaking, inoffensive to their neighbours.

44. The immediate effect of the moderate use of bhang and ganja is that it produces refreshment and exhilaration. To habitual consumers it does not produce intoxication. It does not allay hunger; on the other hand, it creates appetite. The effect does not last longer than a few hours and there are no after-effects.

45. The habitual moderate use of ganja and bhang does not impair the constitution or injure the digestion or the chest, or the moral sense of the intellect. Ganja has been known to produce insanity, but it is only when taken for some time in excess, or by boys or young men not sufficiently strong to withstand its effects.

47. There are no grounds for believing that there is a hereditary longing for the use of any of these drugs.

49. Both bhang and ganja are used as aphrodisiacs. It is so used by men only, although prostitutes have been known to smoke ganja. The use of ganja and bhang as aphrodisiacs is not more injurious than their use as exhilarants.

51. It would be unjust to connect the use of these drugs with crime as cause and effect. It is, on the contrary, believed that those who smoke ganja or use bhang are open-hearted men, who enjoy the happiness of others and delight to see others happy.

56. The only substance which is usually mixed with ganja is tobacco, for the purpose of improving the flavour.

62. The cultivation of the hemp plant should not be controlled. It would hardly be feasible.

69. The wishes of the people are not consulted before a shop is opened in any locality. But that is unnecessary. The licensee is the best man to judge whether there is a demand for a shop in a certain locality.

161. Evidence of MAHARAJA GIRIJANATH ROY BAHADUR, Kayasth, Zamindar, Dinajpur.

1. Informations received from people of various classes who use the drugs.

2. Dr. Prain's definitions are on the whole acceptable. But I doubt that the extirpation of the male plants in the land (and not any other natural causes) is the sole cause of formation of a resinous coating which prevents seeds setting forth freely. I have seen flowers of wild hemp plant, the males and females of which, unlike the cultivated ones, grew together, full of resin. Siddhi, bhang, and subji are the local names of dried leaves of both the male and female plants. The three different preparations of the drug are known as (a) siddhi, subji, or bhang, (b) charas, and (c) ganja, respectively. Of the three varieties of ganja, the round ones are not used in this district.

3. Bhang plants grow spontaneously in Rajshahi, Bogra, Dinajpur, Rangpur, and Malda. They are more or less abundant there.

4. Bhang. Yes.

5. Temperate climate, damp and sandy soil.

6. Dense.

7. Yes. The cultivation of the plant is carried on in the south-eastern portion of Thana Mahadebpur under Government supervision. The plant is grown for ganja and charas, but not for fibre. Oil of the ganja seeds possesses some medicinal property, and is sometimes pressed out of the seeds.

10. No. They are of the same classes as other agricultural cultivators.

11. Wild hemp can be raised from the seeds of cultivated hemp, but not *vice versa*.

13. Yes. Hemp plant is cultivated in a portion of land, about 400 square miles in area, lying at a point where Dinajpur, Bogra, and Rajshahi Districts meet. It cannot be grown on pure sand and land utterly devoid of sandy admixture. Please see my answer to question 5.

14. Yes. Ganja is cultivated in Rajshahi, Bogra, and Dinajpur. Charas is also produced in the same locality, but in very small quantity, and is not known to be exported or exposed for sale regularly. Bhang also is not known here to be prepared for sale. People, however, collect leaves in small quantities in March and April, and preserve them for medicinal as well as for narcotic purposes occasionally. This latter practice, however, is few and far between.

16. People do not prepare bhang "generally" for fear of prosecution. Ganja and charas can be prepared anywhere from cultivated and uncultivated hemp plants; but as the outturn of the last preparation is very small and inferior by far, people do not exhaust their energy in such preparation.

17. Cultivating class.

18. Yes. They quite lose their narcotic effect after two and sometimes three years. They can be kept good for a year with ordinary care. Ganja in air-tight tin-lined boxes, bhang in well covered earthen or porcelain vessels, and charas in plantain leaves, would last without losing their efficacy longer than if preserved otherwise.

19. Ganja and charas are used only for smoking. (The former, however, is sometimes used in medicines.)

20. Ganja is generally used by the lower and labouring classes as well as the religious mendicants and jogis, but seldom by men of higher classes, except Brahmin confectioners and professional musicians. Females, except a few among the prostitutes, do not take anything intoxicating. Charas is used by a very small number of people in Bengal. Inveterate smokers of ganja will never prefer charas, as the intoxication produced by it is not so intense. Young men learning to take intoxicating drugs, or men of nervous temperament, are often found to indulge in charas on account of, perhaps, the mildness of its effect. About 5 per cent. of the male population smoke ganja and 25 per cent. charas. In the North-Western Provinces charas is generally taken with ganja, but not so in these provinces.

21. Round and chur ganjas are preferred. Round and chur ganjas are smoked largely in Southern, flat ganja in Northern and Eastern, and flat and round ganjas in Western Bengal.

22. Native. Foreign from Nepal.

23. People who are too poor to purchase ganja use the dried leaves of bhang sometimes. But such instances are very rare.

24. Taking regular and occasional consumers together, about 15 per cent. of the male population take bhang.

Majum is prepared from bhang. It is a sort of intoxicating sweetmeat. The ingredients are bhang, clarified butter, sugar, and milk.

25. The use of ganja is rather on the increase; of siddhi and charas stationary. The reasons for increased consumption of ganja are:—

1stly.—Religious scruples against spirituous liquors.

2ndly.—Injurious and demoralising effects of spirituous liquors on the mind and body.

3rdly.—Improcureability of such liquors and (where the liquors are more easily accessible) cheapness (comparative) of the drug.

26. Ganja, 5 per cent.	Bhang, 15 per cent.
(a) 2.5	(a) 5
(b) 1.5	(b) 2
(c) .75	(c) 4
(d) .25	(d) 4

27. Ganja is consumed mainly by the labouring classes to ward off the effects of exposure in inclement weather and to endure the hardships of toil in the cultivating season, by the jogis and religious mendicants for concentration of mind, and by the upper classes for the mere luxury of intoxication. The same remarks apply to the consumption of other drugs.

28. Ganja	{ (a) 3 to 6 pies. (b) 2 annas to 8 annas.
Bhang	{ (a) 3 pies to 6 pies. (b) 1 pie to 1 auna.
Charas	{ (a) 6 pies. (b) 1 anna.
29. Ganja	{ (a) Tobacco leaves and water. (b) Rose-water, tobacco leaves, cardamom, saffron, and sometimes charas.
Bhang	{ (a) Aniseed and black pepper. (b) Black pepper, aniseed, and cardamom.
Charas	{ (a) Prepared tobacco or singly. (b) Prepared tobacco and juice of betel leaf.

Cocoanut water, milk, and sugar are sometimes mixed in bhang to make it more intoxicating. Dhatura is very seldom or never mixed with ganja and bhang. Exceptionally inveterate ganja smokers and evil intentioned persons sometimes mix dhatura seeds in the ganja, and I have seen a few bhang drinkers who do not fear to mix arsenic in the drink. The bhang massala generally consists of—

Cardamom, badam, cucumber seeds, kasni, aniseed, rose petals, and saffron, and mace and nutmeg during cold season.

It is taken with bhang only.

30 and 31. Habit is not easily formed, but when once formed, it cannot be easily broken off without the risk of injury to health. Smoking ganja moderately, if habitual, has a tendency to develop into the excessive. But such is not the case with the occasional smokers.

The consumption of these drugs is confined to the male sex only who generally take them in company. Children do not consume any of these drugs.

32. There is no such religious obligation.

The practice of drinking bhang during the Bijoya Dasami and such other festive occasions in very moderate doses is prevalent in Bengal (except in East Bengal). Such a practice is too temperate to lead to the formation of actual "habit," or being otherwise injurious.

33. The consumption of these drugs, and especially of ganja, although there is no religious objection to it, is socially regarded as disreputable, particularly by the upper and middle classes. The lower classes regard it with disapproving conniv-

ance, and the religious mendicants believe it to be essential to their mode of life.

I am not aware of any custom of worshipping the hemp plant.

34. Yes. The fishermen, boatmen, labourers and the jogis.

The fishermen, boatmen, and field labourers, who carry wet clothes on them for nearly half the day, and are exposed to all the inclemencies of the weather, will suffer seriously. Ganja is considered by its consumers as a sort of "concentrated food," and is believed to infuse fresh spirit and energy into the hard worked and knocked up system. However exaggerating the praise bestowed upon the drug by its consumer may be, there is no doubt that in some extent it is invigorating and refreshing.

35. It would not be feasible to prohibit the use of these drugs altogether without conniving at their increased illicit consumption and depriving the poor labourer of the only stimulant that obtains in this country. The prohibition is possible only by strong legislative measures, which will add to State expenses by increasing the works of our Criminal Courts and reducing the revenue.

Serious and widespread discontent, which may be the result of such prohibitions, may not be fraught with absolute political danger, but might not be advantageous politically, socially, or financially,—politically because there will be no end of fracas between the detectives and smugglers and illicit users; socially because people will in that case naturally have recourse to alcoholic stimulants and other drugs which are notoriously injurious to health, and consequently looked down by the society with abhorrence; and financially because it will increase the expenses of the State and reduce the revenue.

36. I believe that alcohol is now rather being substituted by, than for, ganja and bhang. Alcohol is not suited to the constitution of the people of this country owing, perhaps, to their poor diet and the sultry climate.

37. Ganja brings on its habitual consumer an irritative temper, but charas does not do so. The effects of bhang are mild, and do not produce peevishness in its consumer like the ganja.

38. As the ganja consumers are seen to prefer chur and round ganjas to flat ganja, I believe the intoxicating effect of the former is either more intense, or more instantaneous, or more durable.

40. Bhang is used extensively in the treatment of cattle, horses, and elephants.

Ganja and bhang are used by the kabirajes in their medicines. They even ascribe to bhang the following qualities :—

(1) Sourness, (2) mawkishness, (3) pungency, (4) bitterness, (5) digestiveness, (6) intoxicating.

It is used in relieving rheumo-phlegmatic affections, vitiated blood, impotency, etc.

41. (a) Ganja and bhang are digestive, and alleviate acidity, etc.

(b) They give staying-power and alleviate fatigue.

(c) An occasional consumer of ganja is found to become moderately habitual consumer when he goes to malarious and unhealthy tracts.

Labouring classes (among whom I include also Brahmin cooks, confectioners, and the professional musicians) use ganja for purposes mentioned under the headings (b) and (c), and old

and dyspeptic people use it to facilitate digestion. I refer to moderate habitual and occasional use. The benefit derived from indulgence in such drugs counterbalances the harm caused by it.

42. The use of intoxicating drugs, whether moderate or excessive, like intoxicating liquors and other exciting causes, undermines the constitution by giving the system an artificial, and consequently unnatural stimulus. The effect, however, of moderate use is too slow and small to be easily perceivable to any appreciable extent.

43. Yes.

44. The effects of ganja and bhang are stimulating and invigorating. They produce a little intoxication and increase appetite. Although it increases the appetite, ganja gives the power of enduring the hunger. Bhang increases the appetite as well as longing for food. The effect of ganja lasts for one to two hours, and that of bhang not less than six hours. Want of gratification at the prescribed time produces some temporary uneasiness.

45. The moderate use of ganja and bhang does

not impair the health appreciably, injure the digestive power, or cause loss of appetite.

Ganja smoked for years together has in many instances been found to cause bronchitis and asthma.

Bhang stops dysentery. Moderate use of the drugs does not produce insanity. It sharpens, then deadens, the intellect.

46. All the harmful effects may be produced by excessive use of these drugs.

49. Yes. Ganja is an antidote to impotency.

51 and 52. A large proportion of bad characters is either moderate or excessive consumers of these drugs. The consumption of these narcotic drugs has no direct connection with crimes of any general or specific character.

53. Yes. I know of no case.

55. Yes, but complete stupefaction cannot be induced without admixture.

57. Ganja very scarcely eaten. I know of some Urdhabahu Jogis eating it.

162. Evidence of RAJA MAHIMA RANJAN ROY CHOWDHRY, Zamindar, Kakina, Rangpur.

1. Information obtained from medical men and from those men who use these drugs.

3. Hemp plants are cultivated in the districts of Rajshahi and Bogra. In Naogaon Sub-division it is abundant.

4. It is known by the names of ganja and bhang.

6. The growth of the wild hemp is ordinarily dense.

7. There is no cultivation of hemp, but wild hemp (bhanga) grows abundantly in the jungles.

15. Cultivated hemp is used in smoking; charas (cannabis) is also used in smoking. Wild hemp is generally used in drinking (ghata) and smoking, and one of its preparations is made with milk and sugar called majum, and is used in eating.

16. Bhang is generally prepared by the people in their home. It can be prepared from the hemp plant wherever grown. Ganja and charas cannot be prepared from wild plants.

19. Ganja and charas are used only for smoking.

20. Generally sanyasis and people belonging to the singing classes smoke ganja and charas.

23. Bhang is also used for smoking. Those people who cannot afford to purchase ganja, use bhang in smoking.

24. Up-country men are generally accustomed to drink bhang.

28. Habitual moderate consumer of ganja usually smokes one-fourth of a tola per diem, which costs him one anna, and habitual excessive consumer smokes one tola per diem, which costs him 4 annas.

29. Tobacco leaves are ordinarily mixed with ganja to make it mild and to prevent coughing; kneaded tobacco is mixed with charas. Black pepper, milk and sugar are mixed with bhang to make it tasteful and to improve its power of intoxication. Dhatura is not used with any of them.

30. These three drugs are generally practised in company. Their use is mainly confined to male

sex. It is not usual for the children to use any of these drugs; but many of the children of the sanyasis use ganja.

31. The habit of consuming any of these drugs is easily formed. It is difficult to break off. There is the tendency for the moderate habit to develop into the excessive.

33. Those who use these drugs are generally looked in bad lights by the public. There is no such custom to worship the hemp plant.

36. I do not think there is any reason to believe that alcohol is now substituted for any of these drugs. As these drugs are generally used by the poor people, the price of the alcohol being higher, they cannot afford to buy it. But these drugs are sometimes substituted for alcohol.

37. There is great difference between the effect of charas and ganja smoking. The ganja is more intoxicating than charas.

38. Flat ganja is very strong, chur is less strong than flat, but round is somewhat milder.

40. In some diseases bhang ganja is prescribed by the native physicians. This is also used for the treatment of cattle.

41. The moderate use of bhang (ghata) keeps up the digestive power. The moderate use of ganja gives temporary relief after hard bodily labour. Some of the labouring classes of people use ganja to get refreshed after hard labour.

42. To say the truth the use of these drugs is not beneficial to health.

43. The moderate consumers are not offensive to their neighbours.

44. It is temporarily refreshing. It produces intoxication. It does not allay hunger. It creates hunger. It soon drives a man out of temper. Its effect lasts from three to four hours. Its after-effect dullness.

45. It causes loss of appetite. It generally causes dysentery, bronchitis, asthma. To habitual smokers the use of medicine in dysentery produces little effect. The excess in practice of it produces insanity.

47. These drugs are used as an aphrodisiac. The use of the drug is prevalent among the prostitutes.

54. Some of the criminals use these drugs to make themselves strong to commit act of violence or other vices.

55. Criminals in order to carry out their evil

designs induce their victims to partake of any of these drugs and so stupefy themselves. Complete stupefaction can be made without admixture.

62. I do not think it necessary to control the cultivation of bhang as it is not injurious to the people.

68. There is only one license shop at Kakina.

163. *Evidence of MAHARAJA BAHADOOR SIR JOTEENDRA MOHUN TAGORE, K.C.S.I., Calcutta.*

I have the honour to acknowledge the receipt of your letter No. 1581, dated 7th instant, and enclosures, and in reply to say that my knowledge and experience of the subject of the questions framed by the Indian Hemp Drugs Commission are so limited that I regret I am unable to give any precise information thereon. The fact is the hemp plant is not cultivated in that part of the country in which I am a resident, and over which my personal knowledge extends, and that therefore all I can say about the use of the three drugs referred to in the questions must necessarily be of a general character, and as such will, I fear, fail to enlighten the Commission in the way their elaborate and exhaustive enquiries demand. I can only say that ganja and bhang have been in use in this country from a very ancient time, and it appears that the latter especially has the sanction of religion for its use, so much so that on the last day of the great Durga Puja festival the use of Bijoya, another name of bhang, is enjoined on every Hindu, and the custom of drinking a quantity of it, however small, prevails almost in every part of Lower Bengal, if not all over the country. Besides, the drug is considered to be of such an auspicious character that when purchases are made on any festive occasion, bhang or siddhi is the ingredient that occupies the first place among all articles bought. The use of ganja is, however, more confined to the lower and labouring classes of the people than to those who occupy higher positions in life, and are free from the necessity of manual labour. It is generally smoked and seldom, if ever, eaten or drunk. The use, if carried to excess, prejudicially affects the brain, and proves deleterious in other ways; but moderate indulgence acts, it is believed, as a prophylactic against diseases incidental to the low lying parts of the country which are subject to damp and moisture. Its cheapness recommends it to the poor people who require a stimulant to sustain them in their physical labours, and in its effects is less injurious on the whole than alcoholic drinks.

Bhang is a more innocent narcotic. It is general-

ly drunk and is medicinal to some extent in helping digestion. It is largely used in the preparations of the medicines administered by the Kabirajes (native physicians), and is considered both as an appetiser and aphrodisiac. Its use is more extensive among the people of the North-West Provinces, many of whom take it regularly as a stimulating and refreshing beverage every evening, and some even twice a day; nor is the drink, as far as I know, considered reprehensible from a social point of view, for almost every male member of a family uses it freely and openly, and does not look upon its use in the light of a moral delinquency. When used in moderate and regulated doses, it has seldom been known to have any injurious effect.

Charas is much milder in its effects than ganja, and used to be smoked by even the well-to-do portion of the community in former times much more than at present, the test of the people being in recent times diverted to imported wines in preference, undoubtedly to the greater injury of their health.

On the whole, in an economic and perhaps sanitary point of view, the use of the aforesaid indigenous drugs appears to me to be preferable to the use of the ardent spirits and wines now rapidly replacing them, to the great injury of the moral and material well-being of our people.

As regards the prohibition of the use of any or all of these drugs, I am inclined to think, having regard to the very extensive use of them all the country over, so as to make them identical almost with the ordinary necessities of life, that the prohibition, if enforced, would cause serious and general discontent, and, I fear, would lead many to take to the use of ardent liquors; and this, in my humble opinion, would be replacing one evil by another of still greater magnitude.

The above is an imperfect expression of my general views on the subject of the reference and is based on information and observation which I believe to be substantially correct.

164. *Evidence of RAJA SURJYA KANTA ACHARJYA, BAHADUR, Zamindar, Mooktagacha, Mymensingh.*

I can speak from my experience as a native of the district and resident landed proprietor of 24 years' standing, having personally looked after and controlled the workings of my zamindari since 1869.

I would beg to point out that my remarks, whatever they may be worth, must be taken as applying only to my own district (Mymensingh), outside of which my knowledge of the subject is not at all of a precise nature.

In this particular district the extent of my

property and the fact that I tour about a great deal and see things for myself have brought me into more or less intimate touch with all classes of society.

Hemp or ganja does not, I believe, grow spontaneously in any part of this district, and it is generally known only as ganja to the native population.

It is a cold-weather crop, and is to the best of my knowledge only cultivated on that side of the district which abuts on the Jumna river. Though

as to the extent of the cultivation I cannot speak, having but little property in that direction, my impression is that the area under hemp drugs cultivation is exceedingly small; so much so, as to make it impossible for me to classify the location of the different varieties.

It is certain that in all cases the cultivation of ganja is only a matter of agricultural expediency, and is confined to no particular class of the people.

Ganja plants are raised from the seeds of flat ganja, which is the staple hemp drug in common and general use in the district.

Charas is practically unknown in the district, and what bhang there is grows wild.

The principal and almost the only form in which hemp drugs are consumed in this district is in the shape of flat ganja.

The preparation of hemp drugs, like their cultivation, is undertaken by any person, irrespective of caste or creed, either as a commercial speculation or for domestic consumption.

Bhang and ganja, when old, lose their intoxicating power and they become useless after a year or so. It is said that damp and exposure materially lessen the intoxicating effects of these drugs. Charas does not deteriorate so rapidly; it remains effective for years if not exposed to damp. It is also used medicinally.

I do not know whether ganja or charas is used in other ways in general besides smoking, though sometimes majum and other intoxicating confections are prepared with ganja, and it is said that dhatura is sometimes put in them, as well as bhang, to make them stronger narcotics.

Ganja is almost invariably inhaled in the same manner as tobacco smoked, and it is generally believed that more than one-half of the labouring classes smoke it and do so as refreshment, either to stimulate them to the hard work they have to undergo in sun, rain, or cold, as the case may be, or else to assist their repose after the great fatigue of their day's work, and it may be said that ganja-smoking is almost general amongst these classes, without any distinction of locality. A labourer who can afford ganja, will, as a rule, indulge in it, and I would be sorry to see that class deprived of what is to them, in my opinion, an indispensable luxury and an inexpensive tonic.

The consumption is yearly on the increase, as labour in the fields is gradually greater.

Charas is little known and seldom used in this district, while bhang is never smoked and only used in form of sherbet and for medicinal purposes.

Up-country people, who reside here or come down for work, are very partial to bhang; but the consumption is small, and cannot be accurately estimated or localised.

I think it may be safely assumed that the great majority of ganja-smokers in this district are moderate in their use of the drug, although of course some go to excess, as is the case with the drinkers of spirituous liquor.

The average consumption per diem of ganja for an adult may be taken at one-eighth to one-fourth of a tola, up to 2 tolas for an excessive consumer, and aggravated cases have come to my knowledge in which individuals have got through as much as half a *powah*, i.e., ten tolas, in one day. The average cost is about 3 annas per tola.

In rare instances I believe dhatura is mixed with ganja to increase its strength. Bhang and patti are also mixed together with other drugs

and spices by those bent on complete intoxication, but such cases are the exception.

Hemp drugs are as a rule consumed in private, by which I mean on the smoker's own premises, especially by those with whom the practice is not a daily one; but habitual smokers often meet together at a given place and pass their leisure in conversation, refreshing and exhilarating themselves with the fumes of ganja.

I do not believe that any women, except those of loose character, use the drug, and even among that class the percentage of ganja-smokers is very small.

Instances of ganja-smoking among children are almost entirely confined to those who are being trained up for immoral purposes, and are consequently more in the way of such temptation.

The habit of ganja-smoking, once contracted, is apt to become a permanent one, and is certainly very difficult to break off, and in many cases, especially if acquired very early in life, is apt to lead to its excessive abuse.

Among Hindus, in certain forms of worship of their god Mahadeo, the use of ganja is prescribed; but the custom is observed only by the lower classes as a rule.

Recently among the lower class of people a new ceremonial by the name of Tinklapeer has come into practice, in which ganja is the chief ingredient, and in this ceremony habitual and occasional ganja-smokers, even non-smokers, join, and all indulge freely in ganja-smoking, and in these so-called religious meets people are given a taste for ganja.

The use of ganja in connection with religious rites is now-a-days discouraged and in disrepute. Certain ascetics favour the use of ganja very strongly, but I have never heard in this district of such a thing as ganja plants being worshipped.

With special reference to question 34, I think that any such course as the prohibition of the use of ganja would be too drastic a measure, and would entail a serious and perhaps a dangerous privation on the hardest worked section of our population, viz., the *bona fide* agriculturists and artisans. Moreover, it must be borne in mind that our raiyats can afford to pay for a stimulant if they wanted, and once deprived of their ganja, they might, and probably would, take to spirit-drinking, and worst state of affairs would possibly result. At present spirit-drinking among the classes I speak of is almost unknown. In the higher strata of native society the consumption of ganja is on the wane. But the consumption of European liquor by these classes is daily increasing and becoming more fashionable, and ganja-smoking and the drinking of country liquor are looked upon as most plebeian habits.

I believe native kabirajes prescribe ganja as an ingredient in aphrodisiac medicines, and bhang is sometimes used as digestive.

A moderate use of ganja is said to help the appetite, but of course I can speak only from hearsay. I certainly believe that it gives staying-power and recuperates a tired man by assisting his repose as I have previously mentioned.

I am not prepared to say of ganja that it is harmless even in moderation. But at the risk even of seeming inconsistent, I must say that I consider it a necessity to the people and a thing of which it would be undesirable to deprive them.

Doubtless ganja-smokers are of uncertain and irritable temper, but I do not think its effects in that way are worse or even as bad as those of alcohol, and I believe it to be a stimulant better adapted to the native constitutions. There is no doubt that a man can degrade himself mentally, morally, and physically by excess in the use of hemp drugs in the same way as an alcoholic can do; but I think the substitution of alcohol for hemp drugs (and alcohol is to my mind the inevitable substitute) would only magnify what evil at present exists.

The practice of ganja-smoking is not, I think, hereditary, but in certain families it might be called traditional.

It is of course true that most bad characters are ganja-smokers. But whether their vicious tendencies have induced them to take to ganja-smoking or the blame of their moral deterioration is to be attributed to the indulgence in this habit, I cannot say. However, I cannot fully believe that ganja is so much responsible for crime as that criminals make use of ganja as a necessary sedative after, or a stimulant before, the commission of crime.

With regard to the questions asked in chapter VII by the Indian Hemp Drugs Commission, I do not think that I can make suggestions of any value without going further into the matter.

I have only to say that there are ganja shops in almost every town and village in the district, but I do not at present feel in a position to commit myself to any suggestion as to how the existing state of things could be improved. It is certain that ganja shops do not spring up in defiance of public opinion, as the supply is very unlikely to go where there is no demand, and it is unlike a shop-keeper to take his wares to a bad market.

The habit of ganja-smoking has the authority of long custom and tradition, and I think the *chasas* or agriculturists, who are the principal consumers, would consider themselves hardly treated were they deprived of such a necessary luxury. If any steps can be taken to check its abuse, I am heartily in favour of their adoption. But, as I have said before, I think that ganja has now become a positive necessity to the lower classes; and it must be remembered that it is no innovation of western civilization, but a habit dating back, I may say, from very ancient times, the sudden eradication of which would be difficult.

In conclusion, I have only to say that I have refrained from touching any points which lie outside the scope of my personal knowledge, but I believe that such information as I have given you will be found in the main correct and I hope useful.

165. *Evidence of RAJA RANAJIT SINGH, Vaisya, Zamindar, Nashipur, District Murshidabad.*

20. I know of no special classes which use ganja, charas, or bhang as a rule in excess. The drug is in moderate quantities used by sanyasis, up-country people, and the labouring classes, especially in the agricultural and swampy districts of Bengal.

41. The drug is used in moderate quantities with the object of producing narcotic and exhilarating effects, as also relieving fatigue after labour.

28. About an anna worth of the drug is regarded as moderate consumption.

31. The moderate use of the drug, especially ganja, does not unfrequently tend to develop into the excessive use.

32. The drug, especially bhang, is ordinarily used on the occasion of the Holi festival by up-country people, and less so by some people in Bengal on the Dussara day.

46. The effects of the drug when used in (a) moderation are narcotic, and when used in (b) excess, general weakness and prostration, loss of appetite, and ultimate dysentery, especially when the frame is not supported by milk and other substantial food. These effects in the case of charas are serious; so far as ganja is concerned moderately so, and in the case of bhang not considerable.

29. Such admixtures as dhatura, soot, and the juice of pan leaves, are used with ganja with the object of making the drug strong, while in order to produce mild effects are mixed with the drug kahoo,

kashni, koolfa, gokra kanta, rose petals, jastimodhu, cucumber (shasha) seeds, sounf, kharbooza seeds, Gujrati ilachi, and golmarich. Of these, the dhatura and soot appear to be noxious, the former of which is more frequently and knowingly consumed with the drugs with the object of making it strong.

55. This question is answered in reply to question 29.

35. Except for financial considerations, the use of hemp drug, especially charas, should be prohibited. But for the protection of revenue, the use of ganja and bhang should be continued under restrictions. The question is not one without difficulty. The imposition of stricter terms should be gradual, so that the difficulty to those who are in the habit of regularly using the drugs should be slow in their appreciation. Bhang, pure and simple, is not so deleterious as the other two forms of hemp. Hence a free use of this drug will to some extent make up for the restricted use of ganja. The suppression of charas and the restricted use of ganja, will in some measure affect revenue. The rise of the price of ganja and bhang may to some extent compensate for the loss of revenue, but an unreasonable rise is fraught with the danger of adulteration of the drugs with deleterious matter such as dhatura, etc. If this latter can be guarded against, partial prohibition of the drugs as indicated above may be possible.

166. *Evidence of RAI RADHA GOVINDA RAI, SAHIB BAHADUR, Kayasth, Zamindar, Dinajpur.*

1. Contact with persons who use the drugs and from informations received from other sources. In a portion of my zamindari, within the districts of

Bogra and Rajshahi ganja is grown, specially in the subdivision of Naogaon.

2. The three definitions given of the ganja may

be accepted for this province. But the flat and the charas are generally grown in Bogra and Rajshahi and not the round ganja. The flat is locally known as kali and the chur has no other name.

The definitions of siddhi and charas, as quoted from Dr. Prain's report, are also accepted here.

3. Hemp plant grows spontaneously in Dinajpur, Rajshahi, and Bogra. It is abundant in Bogra and Rajshahi.

4. The different names are bhang tree, from which siddhi is prepared, and ganja tree from which ganja is prepared. The plants belong to the same species, but are somewhat different.

5. I have no knowledge of these facts.

6. The growth of wild hemp is ordinarily dense.

7. (a) and (b) Hemp plant is grown in Rajshahi and Bogra for production of ganja and charas.

(c) Plants are not cultivated for production of bhang, and it is prepared from wild plants.

(d) The plant is not grown for fibre and seeds.

8. Not aware of.

10. The persons who cultivate hemp do not form a special class, but are ordinary agricultural cultivators.

11. No.

12. I am not aware if wild hemp is cultivated for production of ganja.

14. Ganja, charas, and bhang are prepared in Rajshahi and Bogra, to what extent it is not known.

15. I have no knowledge of the methods of preparation.

16. Bhang is generally prepared by people in their houses. It can be prepared from hemp plants wherever grown. Ganja and charas cannot be prepared from the wild plant wherever grown.

17. Not known.

18. Ganja, charas and bhang deteriorate by keeping. It loses its effect in time. Deterioration can be prevented by keeping it wrapped in cloth or gunny. It deteriorates in damp.

19. As far as I know, ganja and charas are used only in smoking.

20. Poorer classes generally smoke ganja; charas is rarely used. Most of the sanyasis and mendicants and low-class people, such as day labourers, menials, and up-country palki-bearers, generally use it. The proportion of the ganja-smoking class is about $\frac{1}{3}$ in this district.

21. Flat ganja is preferred.

22. I am not aware what charas, native or foreign, is used.

23. Bhang is not used for smoking.

24. Both rich and poor use bhang. Proportion is not known.

25. Use of ganja is on the increase. The smokers believe that its use makes them hardworking, and brings in concentration of mind.

27. Sanyasis are habitual excessive consumers. Mendicants and menials are habitual moderate consumers. The mendicants travel from place to place, and the reason of their using ganja is that they can endure different climates. The reason which leads the menials, day labourers, etc., to use it is that they can do hard work.

28. To habitual moderate consumers, from 1 pice to 2 pice.

To habitual excessive consumers, from 1 anna to 2 annas.

29. The ordinary bhang māsala is black pepper and aniseed. It is made rich by mixing milk, sugar, rose-water and cardamom, which is used by the higher classes.

30. The use of ganja and bhang is mainly confined to the male sex, and they are used by adults and old men. Children do not use the drugs.

31. Habit of consuming ganja is easily formed, and its moderate use develops into excessive.

32. On the last day of Durga Puja, that is on the Bijoya day, bhang is generally used by all classes. Its use on that day is regarded as essential, but its use is moderate. Many take only a drop of it. It is not injurious, and does not lead to a habit.

33. Use of ganja is regarded as disreputable. The public opinion is against it.

34. It would be a serious privation to excessive consumers to forego the use of ganja and bhang. By the use the consumers feel a sort of pleasure which they cannot forego.

35. It is not feasible to prohibit the use of any of these drugs. Its prohibition would occasion discontent among the consumers. But it would not amount to political danger. Its prohibition would be followed by the recourse to alcoholic drinks or other drugs.

36. I do not think alcohol is being substituted for any of these drugs.

37. Not known.

38. Not known.

39. Drinking bhang, it is said, is less injurious than smoking ganja.

40. Bhang is prescribed for its medicinal qualities by the native kabirajes. It is also used in the treatment of cattle disease.

41. Moderate use of bhang is—

(a) digestive.

(b) Moderate use of ganja gives staying power under severe exertions or exposure or to alleviate fatigue.

(c) It is, they say, febrifuge to prevent disease in malarious and unhealthy tracts. They also say that moderate habitual use is preventive of the above evils.

42. Use of these drugs is not harmless. They injure the constitution otherwise.

43. Moderate consumers are inoffensive.

44. They think it refreshing, because it produces intoxication.

45. The habitual moderate use of these drugs produces noxious effects, physical, moral, and mental.

The use of ganja impairs the constitution. Its use, they say, causes dysentery. Its excessive use impairs moral sense.

It does not bring on debauchery.

It produces insanity.

47. The use of the drugs is not a hereditary habit. Their use does not affect the children of the moderate consumers.

49. It is not practised as an aphrodisiac.

53. Excessive use of ganja incites unpremeditated crime.

167. *Evidence of RAI BAHADUR RADHA BALLAV CHOWDHURI, BAIDYA,
Honorary Magistrate and Zamindar, Sherpur Town, Mymensingh District.*

1. The answers are framed on the local experience I have about the matter, and I have also consulted local men of experience and the medical practitioners (both doctors and kavirajes).

2. Yes, the hemp drugs are known in this quarter by the names given.

3. In this part of the country the growth of wild hemp and bhang is abundant.

Ganja is very rare.

4. Ganja and bhang. These are different species of hemp plants.

6. Scattered.

7 to 9. None.

10. None. There is no cultivation of hemp plant in this part of the country.

14. Ganja and charas are not prepared here. Bhang is prepared here by people from wild hemp plants to a large extent.

15. Bhang is prepared for eating and drinking from the wild plants.

16. Bhang is generally prepared by people in their houses. It can be prepared from plants wherever grown. I cannot say whether ganja and charas can also be prepared from wild plants alike or not.

17. Generally, the people of all classes keep bhang (hemp plant leaves dried) prepared in their houses. Some people keep it as a household medicine and some as a pleasure drug. Bhang is generally kept by the up-country men settled here.

18. I cannot say about ganja and charas, but bhang does not deteriorate by keeping within a year; it loses its effects to some extent by keeping. If properly cared for it keeps good for a whole year. People generally use bhang, at least after some months it was first dried. Its stimulant nature gradually decreases by keeping. Damp is the cause of deterioration. Bhang does not generally deteriorate if it is kept in a dry place and sometimes be exposed to sun. Generally bhang is kept on a *machan* or hung in a pot in the kitchen, so as to keep it always free from being damped.

19. The use of charas is not prevalent here. I have no knowledge of it. Ganja is generally used for smoking, sometimes used also in another shape called *majum*. If ganja is fried in ghi a certain kind of juice comes out of it and this juice is called the *majum*, which is used by people as a pleasant drug mixed with sweetmeat.

20. Generally the working and labouring classes of the community smoke ganja. Generally 10 annas of the population use it. I think it is equally used both in towns and in villages.

21. All kinds of ganja are generally used here, but the flat ganja has preference to others.

22. I have no knowledge of it.

23. Bhang is not used here for smoking.

24. The use of bhang is generally prevalent amongst all classes; the proportion is 4 annas to 16 annas. The use of bhang is much prevalent amongst the up-country men and Beharis settled here.

25. The use of ganja seems to be on the decrease; the reason may be attributed to the use

of country liquor, which is gradually increasing amongst the labouring class. I can say nothing about charas. The use of bhang is neither on the increase nor on the decrease.

26. Ganja and bhang—

(a) Habitual moderate consumers, 15½ annas. a

(b) Habitual excessive consumers, half an anna.

(c) Occasional moderate consumers, 15½ annas.

(d) Occasional excessive consumers, half an anna.

27. Generally the working and labouring classes. They use it generally as a recreation after finishing their day's work.

28. (a) Habitual moderate consumers. The cost per head is not more than half an anna per diem.

(b) For habitual excessive consumers it cannot be more than two annas in any way.

Ganja is sold here at the rate of seven annas per tola.

29. Cinnamon, cardamom, pepper, cloves, aniseed, musk and sugar are used as ingredients in preparing the bhang, but it is not always used. Pepper, cloves and sugar are necessary massalas without which no preparation of bhang can be made; dhatura is not so used. The apparent object of these admixtures is to render the drug more strong than it originally is.

30. Ganja is practised generally in company; bhang sometimes in company and sometimes in solitude. It is mainly confined to the male sex, about 20. It is not usual for children to consume any of these drugs.

31. The habit of consuming ganja is not easily formed, but the habit of consuming bhang is easily formed, as it has a sweeter and milder taste than ganja. If the habit of consuming any of these drugs is once formed it is difficult to break it off easily. I do not think that there is a tendency in the case of any of these drugs for the moderate habit to develop into the excessive.

32. I am not acquainted with any customs, social and religious, which compel the use of any of these drugs. The Tantra sect of the Hindu religion provides for use of these drugs; but, as far as I am acquainted with them, the use is not compulsory, but optional. But the Smriti sect of the Hindu religion strictly prohibits the use of all intoxicating drugs in every shape. It is generally temperate and likely to lead to the formation of habit. I do not think that it is otherwise injurious like alcoholic drink if even moderately used.

33. The consumption of ganja is very much disreputable, not only to the high circles, but even respectable classes of the society; but the bhang is not so regarded. The use of all narcotic drugs except bhang is generally in disrepute. I think the cause may be attributed to its being generally used by low people and to the stupor in habits it forms. I do not know of any custom of worshipping any hemp plants.

34. Yes, it would be a serious privation to certain classes of consumers to forego the consumption altogether, as it will be impossible for them to give up the habit which they have

once formed. It is generally seen that if a ganja-smoker cannot smoke ganja he gets dysentery.

35. It will be impossible to prohibit the use of ganja and bhang; I am afraid that if it is done so the drug would be consumed illicitly, and the prohibition would occasion much discontent, rather a panic among the consumers; but I do not think that such discontent would amount to any political danger. Yes, surely the prohibition would be followed by recourse to alcoholic stimulants, which I think are in themselves much more injurious in every way than ganja, bhang, opium and all other drugs, if even taken together.

36. Yes, I think that alcohol is now being to a certain extent substituted for ganja and bhang. The cause may be attributed to the luxurious habit which the people are acquiring after the Western civilization, which I think they mistake to understand.

37. I do not know anything about charas.

38. I do not know.

39. I am given to understand that the smoking of ganja is more injurious than any other preparation of it for consumption. Bhang is never used in smoking.

40. The bhang is used by kavirajes (Indian doctors) as medicine. I do not know about ganja. Neither ganja nor bhang is used in the treatment of cattle-diseases.

41. (a) The moderate use of bhang is beneficial in its effects as a full accessory to digestion.

(b) Ganja is used by the lower classes of the people, which gives them a staying-power under severe exertion or exposure and to alleviate fatigue. I have dealt with the preparation of the consuming people in question No 26. I refer to moderate occasional use of the drug here.

42. Yes, I consider the moderate use of ganja and bhang to be harmless. I never heard of any such moderate consumers to have suffered from its effect.

43. Yes. Why moderate, even the excessive consumers also are inoffensive to their neighbours, while the man who would drink a glass of liquor goes out into the street to fight with the innocent people.

44. I cannot say anything about the immediate effect of the moderate use of ganja and bhang on the habitual consumers. I think it is refreshing and produces intoxication to some extent. The use of ganja and bhang does not allay hunger. The use of bhang creates appetite. It is seen that the want of subsequent gratification produces uneasiness.

45. The habitual moderate use of ganja and bhang sometimes do mischief to the mental power.

The habitual moderate use of ganja may impair the constitution to a little extent, but the bhang does not.

Bhang and ganja do not injure the digestion or cause loss of appetite.

Ganja causes dysentery and sometimes bronchitis.

Ganja sometimes impairs the moral sense and induces laziness.

Sometimes ganja does deaden the intellect and produces insanity of milder type, and such insanity sometimes becomes temporary and sometimes permanent. Such temporary insanity may be re-induced by use of the drug after liberation from restraint. I do not know about any typical symptoms. Sometimes insanes confess that the use of the drugs has made them so.

46. The same answer I have made for question 45 will answer all parts of this question, but the results are more likely to occur from the excessive use.

47, 48 and 49. No.

50. The excessive use of ganja and bhang tends to produce impotency. I am unable to answer other queries of the question.

51. No.

52. Yes, a large proportion of bad characters are excessive consumers of ganja. The crime of theft generally is the special character of an excessive ganja smoker.

53 and 54. No.

55. No.

The matter related in questions 53, 54 and 55 rather relates to the habit of drinking liquors.

56. The effect of hemp is not modified by the admixture of other substances. I have dealt with the subject in my answer to question 29.

57. I know nothing of charas; ganja is generally used in smoking. There is also another mode of using ganja, which is known here as majum, and with which I have already dealt in my answer to the question 19. The use of majum is not at all injurious to health if used moderately.

Oral evidence.

Question 1.—I am 30 years of age.

Question 45.—My statements regarding insanity are based partly on what I have heard and partly on what I have myself seen. I have not studied medicine and am not aware of all the causes which may produce insanity. Some of the insane persons whom I have known were ganja-smokers. I have seen men who were sane smoke ganja, and found them afterwards to be insane, and therefore I put down the ganja-smoking as one of the causes. I have known ganja-smokers who did not become insane, and these were the majority. I could not profess to be competent to decide the question whether ganja produces insanity or not. My reason for connecting ganja with insanity, and not, for instance, an innocent thing like rice with insanity, is the general belief that it may cause insanity.

168. *Evidence of RAI TARA PERSAD MUKERJEE BAHADUR, Brahman, Zamindar, Pleader, Saran Bar, Chairman of Municipal Board, Revelganj, and of Local Board, Chapra, President, Bench of Magistrates, Chapra and Revelganj.*

20. Fakirs and palki-bearers generally take ganja, some with moderation and some in excess.

Bhang is used by some of the higher and also by the lower classes, and mostly by the Mathura Chowbay Brahmins.

I can't give any opinion or information about charas.

41. Fakirs smoke ganja for the purpose of preventing the accumulation of phlegm, since they have to travel on pilgrimages in different climates. Palki-bearers and coolies smoke ganja to find relief from fatigue.

Bhang is used by many as medicine, and by some as an intoxicant.

It is difficult to say how much pleasure is felt by those who use either ganja or bhang or both.

28. The consumption of each kind of these drugs depends on the constitution of each man.

31. It is probable that moderate use may develop into excessive use.

32. None that I know.

45. When used in moderation, the use of these drugs is beneficial; and injurious when used in excess.

29. Dhatura is sometimes used to make the drugs stronger.

55. Can't give any opinion.

35. No; it should not be prohibited, and neither is it feasible to do so, as the drugs are used by particular classes of men for particular purposes.

59. Cultivators have now and then to give wild bhang to their cattle for medicinal purposes in cases of illness, over-work and general debility, etc. It is not proper to prosecute these cultivators if a small quantity of wild bhang, which each cultivator should keep for his cattle, be found with them. The agriculturists should be allowed to keep a certain quantity of bhang, as there has of late been much deterioration of cattle in consequence of the keeping of the wild bhang by husbandmen even in small quantities being a subject of criminal prosecution.

169. *Evidence of BABU HARI KRISHNA MAZUMDAR, Baidya, Zamindar, Islampur, District Murshidabad.*

1. As a zamindar my property lies in Nadia, Murshidabad, Rajshahi, and Birbhum. I have to go there on business, and I have therefore had opportunities of obtaining informations regarding some matters connected with the use of hemp drugs in those places. Moreover, I had occasion to mix with Beharis, Uriyas, and North-Western Provinces people freely. As a Chairman of the Berhampur Board, I have to travel in the interior of the district on my inspection tour. I am an Honorary Magistrate with first class powers, and have to try several police cases.

2. The definitions of charas, ganja, siddhi or bhang may be accepted for my province, and they are locally known by the names charas, ganja, and siddhi.

6. The growth of the wild hemp in Murshidabad is generally dense.

7. There is no cultivation of the hemp plant for the production of ganja and charas in Murshidabad, Nadia, and Birbhum.

12. In this part of the country wild hemp is not cultivated. They grow on damp soft soil. They are generally seen in unused tanks.

16. In most cases people prepare bhang or siddhi in their houses from wild plants. They also prepare ganja, though not generally, from wild plants grown in jungles, but I have not heard of preparing charas.

19. No; generally ganja and charas are used for smoking purposes; but ganja is also used for medicinal purposes. I know of some men who chew ganja.

20. There are no special classes who smoke ganja and charas. But generally they are used by people of lower classes. The sanyasis in general use ganja. About 15 per cent. of lower class of people,

5 per cent. of gentlemen, and 99 per cent. of sanyasis smoke ganja.

21. Flat ganja is preferred for smoking.

22. Charas is generally imported from the North-Western Provinces, and it is chiefly used.

23. Bhang is scarcely used for smoking.

24. In Bengal very few people drink bhang regularly. During Durga Pujas some people drink bhang. In Bihar, Orissa, and the North-Western Provinces most people drink bhang regularly.

25. The use of ganja, charas, and bhang, or of any of these drugs, is not on the increase. Some twenty or twenty-five years before in mufassal towns and big villages there were regular *addas* for ganja-smoking. Generally those *addas* are not now seen. Most people have substituted opium or liquor, or both, for ganja. In some cases it is also seen that people substitute ganja for liquor and break off the habit of drinking, and *vice versa*. I know of some four or five gentlemen who were excessive drinkers of alcohol, but they have now left drinking, but have taken to ganja-smoking regularly. In old days, when liquor was not so available as it is now, the number of people addicted to drinking was small. People want something for stimulation; consequently they will either use ganja, opium, or alcohol.

28. Four chillums of ganja per diem are regarded by the habitual moderate consumers as the moderate allowance, and they cost about half an anna. Charas is not generally used by a separate class of men for smoking purposes. Those who smoke ganja take charas generally. Bhang or siddhi is less costly, and for a habitual moderate consumer twice a day is sufficient. Habitual excessive consumer's average allowance of ganja per diem can-

not be ascertained, but I think twenty-five chil-lums per diem can be taken.

29. Opium and dhatura are mixed with ganja to increase its intoxicating power. Dhatura is also sometimes mixed with siddhi or bhang, which makes the drug more intoxicant. Dry tobacco leaf is always mixed with ganja. No bhang massala is sold here for the purpose of being mixed with these drugs. People mix golmirich (pepper), dhania, and mahuri with siddhi or bhang, and sometimes milk and sugar.

30. In most cases the consumption of each of these three drugs is practised in company. Generally some men assemble together in a place for the purpose of smoking ganja, which is called "ganjar adda". Here they talk on various subjects and concoct plans for the fulfilment of their evil intentions. Bad characters generally assemble in such an *adda*. It is confined to the male sex, though not mainly. Some women of low caste, such as bagdi and bania, and some women of ill fame use it. It is not confined to any time of life, but generally children do not consume any of these drugs.

31. The habit of consuming any of these drugs is not formed easily. I do not think that it is not difficult to break off the habit easily, though I have seen several smokers of ganja who after using it for a long time have left it. The moderate use of the drug tends to develop itself into an excessive one, is the opinion of the veteran smokers.

32. In some places there is a social custom that the people there drink bhang or siddhi during the Durga Pujas, especially on the last day of the Puja on Dasami day, when the idol of goddess Durga is taken to the river, people generally drink bhang. The use of the drug in connection with such custom is not regarded as essential. It is not likely to lead to the formation of the habit or otherwise injurious, a day or two in a year cannot do any permanent harm or good.

33. Gentlemen class generally regards the consumption of these drugs as a *vice*, but the case is quite different with the lower class people. He who can smoke ganja in excess gets the title bhangi—perhaps the name has been derived from bhang—boasts when he is addressed by other people with this honourable title. There is no social or religious public opinion in regard to the practice. I do not know any custom of worshipping the hemp plant on certain occasions by certain sects of the people.

34. It would be a serious privation to the mendicants, jogis, sanyasis and fakirs to forego the consumption of the drug they use. These innocent religious men are the houseless children of want and have to bear all kinds of weather.

35. It would not be possible to prohibit the use of these drugs; the use of the drug has been so widespread that if it be prohibited the habitual smokers of ganja and charas and drinkers of bhang will be quite unfit for any active work for sometime. It is generally seen that when a habitual consumer of ganja drugs, opium, or liquor leaves his habits either willingly or by force, he feels such uneasiness for some time that he becomes quite incapable of any active work. It is moreover largely used by physicians as medicine. Besides these, ganja-growing fields will be left uncultivated causing a great loss to the cultivators and others who have interest in them. In case of prohibition of the use the drug would be consumed illicitly. I am afraid the prohibition would occasion serious

discontent both among the consumers and those who are interested in the cultivation. This discontent may also amount to political danger. The prohibition will certainly be followed by recourse to alcoholic stimulants or other drugs.

36. Yes, there is sufficient reason for thinking that alcohol is now being substituted for these drugs. The alcohol has got free access to almost every house in the country either openly or privately. Ganja *addas* or assembly of ganja consumers are gradually decreasing. On merry-making occasions old class of people used to drink bhang for pleasure's sake, but among the young men, certainly there are good many honourable exceptions, now alcohol is being used freely, in some places it has become a necessary item for big occasions such as celebration of marriage, etc.

40. The use of ganja and siddhi is prescribed on account of its medicinal qualities by kavirajes. Both ganja and siddhi are used in the treatment of some cattle diseases.

41. The moderate occasional use of ganja and siddhi is beneficial in its effects—

- (a) as a digestive ;
- (b) to give staying-power under exertion or exposure or to alleviate fatigue ;
- (c) as a febrifuge in malarious tracts ;
- (d) in curing impotency.

42. I think the moderate use of these drugs to be harmless.

43. Yes, moderate consumers are not offensive to their neighbours.

44. Immediate effects of the moderate use of any of these drugs on the habitual consumer is that it is refreshing, it produces a little intoxication and it creates hunger.

The effect lasts for an hour at the most, the after-effect is not injurious to health. A moderate consumer does not feel any uneasiness for want of subsequent gratification.

45. The habitual moderate use of these drugs does not produce any noxious effects, physical, mental, or moral. It does not impair the constitution in any way. It has been highly spoken of by Hindu medical writers as it cures indigestion, increases appetite and removes cough. Neither it causes dysentery or asthma, nor does it impair the moral sense or induce laziness or habits of immorality. In Raj-nirghanta it has been said that it gives good memory, increases the power of speech and makes a man strong and stout. Roy-ballava denominates it as mother of pleasure (*harsha janani*) and says that it even cures leprosy and impotency.

46. When the drug is used in excess the effects are quite opposite; it then produces noxious effects. By the immoderate use of this drug the temper generally becomes irritable and it is generally seen that the after-effect is dysentery. According to Hindu medical writers the excessive use brings on stupor and useless talk.

47. Neither the habitual moderate use of the drug is a hereditary habit, nor it effects in any way the children of the moderate consumers. I know several young men whose fathers were habitual smokers of ganja, but the sons do not smoke or use any of the drugs. I know an old Brahmin who was a habitual moderate consumer of ganja. He died at a good old age of seventy. He left two sons who are practising as muktears in some district Court. They are healthy, strong and intelligent; one of them does not even smoke tobacco.

48. Habitual excessive consumption of the drug is not also a hereditary habit and it does not affect the children anyhow. I know two gentlemen whose fathers were not in the habit of taking any intoxicating drug. They (the sons) were excessive consumers of ganja drugs, opium and liquor when available. They died early, but their (consumers') sons are strong and healthy and they do not use any intoxicating drug.

49. The moderate use of ganja and siddhi is practised, though not generally, as an aphrodisiac. I know of a good eminent kaviraj who advised a gentleman to drink siddhi for this purpose. Some prostitutes use ganja for this purpose. Some time ago a prostitute told a gentleman to smoke ganja to increase his venereal appetite. I do not think it more injurious. No; the use of hemp does not tend to produce impotence.

50. The case is quite the contrary when it is used in excess.

51. In towns a large proportion of bad characters

are habitual moderate consumers of ganja. I do not think that there is any connection between the moderate use of ganja and crime in general, but the advantage of the use of the drug is that they can talk and consult matters in *adda* freely, and the use of the drug stimulates a little. The consumers of ganja generally commit petty thefts.

52. The excessive use of ganja has the tendency to make the consumer lazy and inactive.

53. The excessive indulgence of any of these drugs does not incite to unpremeditated crime, violent or otherwise. I do not know any case in which it has led to temporary homicidal frenzy.

54. Yes.

55. I have no personal experience, but I have heard that criminals, in order to further their designs, induce their victims to partake of bhang or siddhi mixed with sherbet and so stupefy themselves. Complete stupefaction cannot be thus induced by this drug without admixture.

170. Evidence of FAZL RUBBEE, Dewan to His Highness the Nawab Bahadur of Murshidabad, Murshidabad.

20. There are no classes which specially use ganja, charas or bhang in moderation or in excess except sanyasis. Ganja is to some extent used by the labouring classes of the people, such as boatmen, fishermen, bearers, etc., in moderation.

24. The up-country men residing in Bengal take bhang, though not in large quantities. The number of people who take charas, however, is limited.

41. Ganja is smoked to counteract the evil influences of the climate and also for purposes of intoxication. Bhang is used as a stimulant and also as a provocative of appetite. It keeps the system cool. The use of ganja enables one to concentrate his attention to any subject that one takes up. The pleasure consists in the narcotic effects produced by the consumption of the drugs.

28. One to four chillums of ganja and charas and from half to one tola of bhang a day is regarded as a moderate consumption. The cost of ganja would be about 4 pice, that of charas about 3 annas, and that of bhang about 2 pice.

31. Yes, generally.

32. There are no special occasions when ganja is socially or religiously used. Bhang is used on the Bijoya and Sivaratri days by a large number of all classes of the Hindu people.

44. Ganja in moderation protects one from the injurious effects of the climate. Bhang in moderation is attended with no evil effects.

46. The excessive use of bhang produces excessive intoxication.

Ganja in excess breaks down one's health; charas does the same, but not bhang. Ganja

and charas produce strong intoxication, even in small quantities, whereas bhang in moderation is very mild in its effects.

29. Tobacco is generally mixed with ganja to render the smoke more mild and agreeable. Dhatura and kuchla (*nux vomica*) are mixed with ganja to make the narcotic effects stronger and lasting. Such admixtures are made use of by the sanyasis, as ganja alone fails to produce the desired effect.

55. No, except those stated above.

35. No. Though, as already stated, the consumption of ganja is injurious to health, and its stimulating power is temporary and weakening, yet its entire prohibition would not only be not practicable, but would bring in other worse intoxicants.

67. In the present excise system the high duties imposed and the increased license fees levied upon the drugs have raised their prices too high, and the consumers who cannot afford to pay for the quantity they require, buy a little and admixture other poisonous substances with it, as stated above, knowingly, for reasons already mentioned, and thereby totally ruin their health, and sometimes ultimately even meet with an untimely death.

35. I think the use of bhang and ganja should not be prohibited altogether. Their complete prohibition might bring in a more extended use of alcoholic liquors and other poisonous substances, which would be worse than ganja for the people.

The use of bhang, as far as I know, is not so injurious. It does very little harm to the health of the consumer, except that it makes him very much intoxicated when he takes it in excess.

171. Evidence of BABU RAGHUNANDAN PRASAD SINHA, Brahman, Zamindar, District Muzaffarpur.

1. I have personally seen many ganja and bhang consumers of various classes and degrees. Many of them are and have been my servants, and residents of the place I live in. Numerous instances of sadhus consuming and its effects upon them have come under my personal observa-

tion. I have seen many consumers of the town and watched the effects of consumption upon them.

3. In the districts of Western Behar (*i.e.*, the districts under the Commissioner of Patna Division) only the male hemp plant, which is simply

used as bhang, and can in no circumstance be used as ganja, grows spontaneously.

4. The male hemp plant is called bhang plant and the female hemp plant from which ganja is prepared is called ganja plant. They do not refer to exactly the same plant.

5. The male hemp plant grows wild generally in an uncultivated land, and does not require specially good soil.

6. Of the wild male hemp plant (used as bhang and not as ganja) dense.

7. No. The cultivation of the hemp plant in this province for production of either ganja or charas, or for its fibre or seeds, is never done, and is also a criminal offence. No cultivation of even male hemp plant is done, but it grows abundantly wild in an uncultivated place, which some people gather and use as bhang.

8. There has been total decrease in the area wherein male hemp plant used to grow wild, because the village police, under instruction from the superior Police officers, has this year uprooted the wild hemp plant grown anywhere.

11. No.

12. No; male plant is extirpated.

13. Yes; restricted to all the districts. In the Patna Division its cultivation on a large scale would be impossible, hence restricted.

14. Ganja and charas are not prepared in this province. The male hemp plant grown wild is used as bhang everywhere, which requires no special preparation.

15. The male hemp plant grown wild is plucked and dried in the sun, and then its leaves washed in the water, and then used for eating and drinking after its being powdered with at least golmirich. It is seldom used for smoking. One rare preparation of bhang is called majum, which is prepared by boiling bhang together with misri, etc., etc., in ghee, which is used very rarely, only by the rich men of the town.

16. Yes. Perhaps bhang cannot be prepared from the female hemp plant from which ganja is prepared, and, if prepared, it would not be liked by people, as it would not come to the same standard of taste and other requirement found in bhang of male plant. Ganja and charas cannot be prepared from the wild plant wherever grown.

19. Generally speaking, they are used only for smoking, but I have heard of ganja used even as medicine. Ganja is offered to certain elementals (lower Devas) in worship by certain class of persons.

20. In villages none smoke charas, which is smoked only in town by comparatively very few persons, specially old Muhammadans. Eighty per cent. of sadhus (ascetics) of all orders and places, smoke ganja, and also a little less than 5 per cent. of Hindu house-holders do smoke it, specially town people. Muhammadans do not smoke ganja on religious grounds.

21. Flat (patti) ganja is preferred for smoking.

23. Barely bhang is used for smoking by the ganja-smokers when unable to obtain ganja either for want of money to purchase it or any other cause.

24. Nearly 85 per cent. of sadhus (ascetics) of all orders and places eat or drink bhang, and also 20 per cent. of the Hindu house-holders; but many of them do not do it continually and regularly, and specially not all the year round. Bhang-

drinking is specially done in hot season, and eating in rainy and winter seasons. The practice is universal and not confined to any locality. Sixty per cent. of the higher Hindu castes of the North-Western Provinces do drink or eat bhang, which is specially universal in its character in Muttra among Chanbays. Bhang eating is resorted to by comparatively few persons.

25. Ganja and charas smoking on the decrease, specially on account of high rate charged for ganja. The use of bhang is neither increasing nor decreasing, but stationary.

26. Among ganja-smokers—class (a), 50 per cent.; class (b), 12 per cent.; class (c), 35 per cent.; and class (d), 3 per cent.

Among bhang consumers—class (a), 35 per cent. class (b), 12 per cent.; class (c), 50 per cent.; and class (d), 3 per cent.

27. Rich men seldom smoke ganja, and it is specially the middle class men who smoke it. Wrestlers, travellers, and others who have to do bodily labour specially betake themselves to bhang consumption.

28. To ganja-smokers, class (a) half anna and class (b) one anna; to bhang consumers cost is almost nil, as bhang is everywhere to be had gratis or without price; hence there is nowhere regular selling and purchase of bhang.

29. Dry tobacco leaves are ordinarily mixed with ganja, golmirich ordinarily with bhang, and bhang massala is exceptionally mixed with it (bhang). No dhatura is used as ingredient thereof (either ganja or bhang). Bhang massala is sold in bazar, the ingredients of which are (1) rose-flower, (2) seeds of cucumber, (3) golmirich, (4) pimpinella anisum, (5) chiraunji, etc., etc., etc. Ganja without admixture is specially injurious to health, hence the necessity of admixture. The admixture of bhang is for taste.

30. Ganja is generally smoked in company; but as regards bhang, it cannot be said either in company or solitude, which is consumed mostly once in a day, and rarely twice a day. Ganja and bhang consumption is mainly confined to the male sex, and children do not usually consume them.

31. Ganja consuming habit difficult to break off in case of habitual consumers, but the case is contrary with the bhang. Moderate ganja consumer may not develop generally into the excess consumer, but occasional consumer may develop into the habitual moderate consumer. In case of bhang consumers such is not the case.

33. Bhang consumption is regarded quite innocent and beneficial to health, but not so the ganja consuming by house-holders. Ganja-smoking by house-holders is generally in disrepute; generally on account of its expensive character, and also because its consumption sometimes makes the consumer lazy. Ganja is offered to certain class of elementals (Bhutas or Devas of lower kind) by certain persons in worship.

34. To habitual consumers of ganja and bhang (specially to those consumers of bhang who consume bhang on medical ground), and more specially to sadhus, it would be serious privation to forego the consumption of the drug they use. The habitual consumers of ganja, when they do not smoke it for some time, become unfit for any work and much uneasy (occasionally senseless) until they smoke it.

35. (a) Not feasible.

(b) Yes.

(d) Prohibition will occasion serious discontent among the consumers.

(e) Sadhus may create political danger, but house-holders will not.

(f) Not to alcoholic stimulants, but to other drugs may.

36. No. But the fact is this that the greater number of the consumers of bhang and ganja are among those castes who do not have recourse to alcohol on account of prohibitive caste rules.

37. Yes; charas-smoking cannot be regarded as stimulant, but its contrary, whereas ganja-smoking sometimes serves as stimulant.

39. No; rather I would say, bhang drinking or eating not injurious at all, but generally beneficial to its consumers, as it cures many diseases, such as piles, etc., etc., which is not to be expected from ganja and charas smoking.

40. All the schools of native doctors prescribe invariably bhang-taking on account of its medicinal properties, and bhang is widely used in the treatment of cattle disease. Bhang is a sovereign remedy for the poor in *sit-jvara* (periodical fever).

41. Ganja may in cases of (b) and (c), and bhang may in (a) and (b), but not charas.

Sadhus (ascetics) generally use bhang for purposes mentioned in (a) and (b), and ganja for (b) and (c), and also for the purpose of averting the injurious effects of bad climate of several places when they go on pilgrimage. There is a certain class of sadhus called "tapasvi" and "naga," large in number, who do not live in houses even in the winter season, but in open place, and moreover do not keep cloths upon their bodies, and to them ganja-smoking is a matter of necessity in order to warm them. I refer to the moderate habitual use of ganja, because moderate occasional use thereof generally ends in moderate habitual use. In case of bhang I refer to the moderate occasional use.

42. Yes, harmless. Moderate use of ganja acts as a stimulant and prevents the injurious effects of cold upon constitution, climatic or otherwise. The use of bhang prevents and cures many diseases, such as piles, indigestion, and fever, and also has refreshing effect.

43. Yes.

44. Yes; moderate use of bhang and ganja is refreshing. To habitual consumer, and even to moderate occasional consumer, the use of bhang and ganja does not produce intoxication; and if it ever produces intoxication at all, not of the kind produced by the use of alcohol, but quite inoffensive. Ganja use does not allay hunger, but bhang may. Bhang creates appetite, but not ganja. No after-effects in the use of bhang and ganja. In case of ganja want of subsequent gratification produces uneasiness.

45. (a) Of bhang does not; of ganja does sometimes, mental and rarely moral even.

(b) Bhang does not; ganja occasionally may.

(c) Bhang does not; ganja occasionally may.

(d) No. Answer refers only to bhang and ganja.

(e) Bhang use does not; the use of ganja not unoften induces laziness and sometimes even habits of immorality only to the persons who are naturally immoral and not to others.

(f) Bhang use does nothing of the kind, but ganja use may sometimes deaden the intellect, but cannot produce insanity.

A chela (disciple) of Mahant Ganesh Dass, the Mahant of Maniari, District Muzaffarpur, grew insane, who was a habitual excessive consumer of ganja, which he even consumes while being insane, but there is no certainty of the fact that this insanity is due to the consumption. The other insane persons I have met were not ganja-smokers.

46. There are many eminent sadhus who are habitual excessive consumers of ganja, but no kind of injury has thereby been done to them. But others (besides great sadhus) who are excessive consumers of ganja are more or less injured, but excessive habitual consumers of ganja are mostly found among sadhus.

47. No. Answer refers only to bhang and ganja.

49. As regards bhang, no.

51. As regards bhang, no. As regards ganja, it is no doubt a fact that many bad characters are habitual moderate (rather excessive) consumers of ganja, but there is no connection with their crime and ganja consuming. It is the bad characters who have betaken themselves to ganja consuming, but not the ganja consuming which has made them bad characters.

53. As regards bhang, no.

54. No (refers to bhang and ganja); but they may use ganja as stimulant.

55. Complete stupefaction not possible from ganja or bhang without admixture of dhatura, etc.

57. Ganja is never eaten except as medicine.

62. No; controlling not required.

65. Taxation of bhang not reasonable.

67. Bhang must not be taxed.

68. I have seen ganja consumed in the shops where they are sold, which ought to be stopped.

69. Wishes of people are not consulted or considered. Yes; local public opinion ought to be considered.

70. No. No ganja is allowed to be brought from Nepal, and sufficient precautions are taken for this purpose by Nepalese police officers, who examine the luggage of men coming from Nepal.

172. Evidence of BABU SURENDRA NATH PAL CHOWDHURY, Zamindar, Ranaghat, District Nadia.

1. As a zamindar owning landed property in the districts of Nadia, Jessore, Khulna and the 24-Parganas, in all of which hemp drugs are more or less consumed, Jessore and Khulna claiming the foremost place.

2. Yes. They are known by the names mentioned in Dr. Prain's report.

3. In almost all the districts I have mentioned, and have experience of, the hemp plants grow spontaneously, but no use is made of them.

4. It is known as bunna or jungli siddhi (wild hemp). This, I cannot say, refers exactly to the same plant cultivated in Naogaon and Patna.

6. Ordinarily dense.

7. (a) Yes.

(c) Yes, in Behar.

10. No. They are of the same classes as the other cultivators.

11. Not that I know of.

12. Not in the places I know of.

13. Yes. Rajshahi in Bengal, and Patna in Behar.

14. (a) Yes.

(c) Yes.

15. (A) Ganja, before being smoked, is generally cut to pieces, sprinkled with a little water, and mixed with a little quantity of prepared tobacco and sometimes with that of dried tobacco-leaf. By well-to-do smokers the drug is soaked in rosewater before being used.

(B) The drug (bhang) is sometimes used with pan (betel) in the same way as spices. Some confections are made with the drug ground.

(C) As a beverage, bhang is drunk mixed with rosewater, milk and sugar, black pepper, aniseed and some other seeds, and spices. The poorer classes generally seem to be content with only water, black pepper and aniseed.

16. (a) Yes.

(b) an No.

19. Yes.

20. The industrial classes (mostly up-country men) smoke ganja with very few exceptions, while the consumers of charas are mostly Muhammadans in up-country, not without a sprinkling of Hindus. Charas is generally used as an aphrodisiac.

21. Round ganja is preferred for smoking, but the other kinds being cheaper are generally used.

22. Foreign charas is chiefly used.

23. Yes, but rarely. Not in any particular locality or localities.

24. The up-country men generally drink bhang, though occasionally eat it. Perhaps it will be no exaggeration to say that almost all of them indulge in it. Bengalis also, to some extent, eat or drink it, either for medicinal purposes or as an intoxicating drug, instead of alcohol.

25. The use of these drugs, if anything, is perhaps on the increase. I would attribute it to the rise in the price of country liquor, consequent on the abolition of outstill system; secondly, there is a certain sect of Muhammadans (found among the lower classes) who though they used country liquor before, have now taken to these drugs, as alcohol is prohibited by their religion; thirdly, many well-to-do people have begun using them; and lastly, the Ayurvedic treatment in which bhang is used in many diseases, gaining popularity in these days, the kabirajes require the drug more largely than before.

26 and 27. (a) The number of "habitual moderate consumers" far exceeds that of "habitual excessive consumers." The labouring classes, such as boatmen, fishermen, coolies, etc., having to be exposed to the inclemencies of the weather, generally resort to the use of ganja, although

moderately: up-country men with few exceptions habitually use bhang in moderate quantities. There are few men in this province who habitually consume any of these drugs, charas in special, and that too moderately.

(b) I had no occasion to come across or hear of habitual excessive consumers of charas, though I cannot say that this class of consumers of ganja and bhang are not to be found. Certain religious sects, such as jogis, sanyasis and fakirs (both Hindus and Muhammadans) use these drugs (ganja and bhang) in excessive quantities to enable them to endure hardships, to deaden their passions, etc.; and their number is not small.

(c) Amongst others, bhang is generally used for medicinal purposes, though occasionally drunk for the sake of pleasure by number of respectable Bengalis and up-country men. There is a very small number of occasional moderate consumers of ganja and charas, who use them for the sake of pleasure. They are generally found among the well-to-do class of men. On some religious occasions bhang is used by all Hindus in moderate quantities, and ganja by some, moderately too.

(d) Bad characters take to excessive consumption occasionally when they have anything to do, as thereby their senses are stupefied. Licitious persons and profligates, though they also come under head (a), generally have recourse to excessive use of these drugs (charas in especial), the effect being sexual endurance.

28. (a) To a habitual moderate consumer of ganja, the average daily cost may be two pice; moderate consumer of siddhi has generally to spend one pice or less per diem.

(b) About two annas is the approximate average cost of an excessive consumer of ganja, though there are cases where a smoker spends four to six annas per diem on the drug. As for siddhi or bhang, two pices ($\frac{1}{2}$ anna) might be said to be the average daily cost of an excessive consumer.

29. (a) Black pepper and aniseed with bhang, dry tobacco leaves with ganja and prepared tobacco with charas are ordinarily used. To assist digestion and to prevent cold the mixtures are used with bhang. To impart mildness in smoking is the object of admixtures with ganja and charas.

(b) With bhang, spices are used for making it flavoured; milk and sugar, to sweeten it and make it stronger; as are also dhatura and soot with bhang, and dhatura with ganja, used with the object of increasing and retaining for some length of time the intoxication.

There are a collection of seeds, called bhang massala, which are used with bhang to increase the flavour of the drink.

30. The consumption of these drugs is generally practised in company; only those who use any of these for medicinal purposes take it in solitude. The profligates also generally use it in solitude. I cannot say that these drugs are solely confined to the male sex, although the overwhelming majority of consumers come of this sex alone. None of these drugs is confined to any particular time of life, although the youths generally take to these things; but in the cases of excessive drunkards, they having given up the use of alcohol, use ganja or bhang excessively even at an advanced age. It is not usual in children to use any of these drugs.

31. I don't think the habit of consuming any of these drugs is easily formed, or it is very difficult to break off. The moderate habit in the use of these drugs does not tend to develop the excessive use of them.

32. Dussera or Bijoya Dashami and Siva Ratri are the religious festivals in which it is the custom to use bhang and ganja. Ganja is not required to be taken during the former festival, while bhang is freely used on both the occasions.

The consumption on these occasions, though generally temperate, is not so necessarily. It is not likely to lead to the formation of the habit, or otherwise injurious.

33. The moderate consumption of bhang, specially on religious occasions or for medicinal purposes, is not looked down upon, but those of others (ganja and charas) are. The use of any form of the narcotic is generally held in disrepute, as that destroys the sobriety, morality and the innate dignity of man. Those addicted to this habit are generally found to lose their steadiness of character. There is a sect of Puritans who, having no regard for these religious ceremonies, look down upon the use even of any of these narcotic drugs. I do not know of any custom of worshipping the hemp plant.

34. Yes, I think it would be a serious privation at once to forego the consumption of the drugs, specially the siddhi, or bhang, and in some cases even ganja. Amongst others, the industrial classes shall perhaps suffer most if they be deprived of the use of what they consider to be a necessity (*vide* answer to question 26).

35. No, not siddhi in special. The result of such prohibition would be illicit consumption. Prohibition can by no means be strictly enforced, for, as experience shows, in spite of the excise laws, cases of illicit sale of excisable articles are often heard of. Yes, I think it would occasion serious discontent among the consumers; but I would not fear so much as to cause political danger, certainly not in this province. Yes, the prohibition in the consumption of these drugs will, I am afraid, be followed by the use of the baneful and absolutely ruinous alcoholic stimulants.

36. These drugs are replacing alcohol to a certain extent. The rise in the price of distillery-liquors, in consequence of the abolition of the outstill system, is mainly the reason of the poorer classes resorting to some of these drugs more largely than before. Amongst the well-to-do classes, their sad experience of the baneful effects of alcohol in this country, is chiefly the cause of giving up liquor for bhang or ganja. As a proof of what I have stated, I might mention the increasing sale of these drugs.

37. The effects of charas smoking last longer than those of ganja. The former is generally used by pleasure-seekers, its effect being sexual endurance.

38. I don't know.

39. Certainly not, rather the more injurious.

40. Yes, only bhang is largely prescribed and used in some way or other for its medical qualities by the Hindu school of medical science or Ayurveda. Ganja is used by European doctors, of course mixed with some other ingredients. I am not aware of their use in the treatment of cattle diseases.

41. (a) The moderate use of bhang is beneficial, as it tends to help digestion. The use is not confined to any special class.

(b) Ganja gives staying-power under severe exertion or exposure, and tends to alleviate fatigue. It is used by the industrial classes as such, and in moderate quantities.

(c) It is said to be a preventive of disease in malarious and unhealthy tracts. Moderately used by the industrial classes.

(d) Bhang with sugar is sometimes consumed moderately by songsters to make their voice sweet.

42. Yes.

43. Yes. They are unlike the consumers of alcoholic stimulants.

44. To a habitual consumer, the effect is refreshing, inasmuch as the moderate use of any of these drugs alleviates fatigue. The effect on a habitual moderate consumer of any of these drugs ceases to be intoxicating after the habit is acquired. Rather than allaying hunger, it creates appetite. The effect of a chillum of ganja (which is perhaps the strongest of all the drugs) on a habitual consumer does not last more than an hour at most.

45. (b) Ganja and charas do injure the system. They injure the liver and spleen, and hence cause loss of appetite.

(d), (e) and (f) Yes.

46. The excessive use of ganja and charas may bring on the bad effects I have stated above.

47 and 48. No.

49 and 50. Yes, in some instances. The moderate use produces no injurious effects, but the excessive use of hemp tends to produce loss of power.

51. A large proportion of bad characters are consumers of some of these drugs. A habitual moderate consumer, when unable to afford to pay for the drug he is used to take, often takes to petty thefts. I do not see any connection it has with crime in general.

52. Occasional excessive use seems to be in some way connected with violent crimes. The effect of excessive use is to stupefy the consumer for the time being, when he could not be held responsible for his actions.

53. Yes, the excessive use of ganja only.

54. Ganja may be used in this way. But I do not know of any such cases.

55. Yes, but complete stupefaction is impossible unless the drug is mixed with dhatura or any other ingredients.

56. (a) Bhang—

(i) Mixed with milk seems to make a man merry, and nourish the body. Bhang and milk are said to cure eye-diseases.

(ii) When diluted with pure water and honey and mixed with ground black pepper and aniseed, it is believed to increase the appetite and to remove cough.

(iii) Bhang administered with ghi is said to sharpen memory.

(iv) When used with salt is said to promote digestion.

(v) When used with sugar and molasses, it is said to nourish the body and invigorate the system, etc.

(b) The effects of hemp used in excess, modified or not by the admixture of other substances, are always detrimental. The admixture of dhatura with ganja or bhang tends to bring on insanity.

57. I have no experience of this.

58. I cannot say that the present system of excise administration in Bengal is working well, though no better system could be thought of.

59. The system is all that could be desired in order to prevent illegal sale of exciseable articles, but owing to the inefficient working of the system, the effect produced is not wholesome. The head of excise administration has, if my information be correct, made it incumbent on his subordinates to detect one or two cases of illicit sale every month, and to secure a conviction of the offender, failing which the subordinates are either fined, suspended or dismissed. The excise law, moreover, allows a handsome reward to such men who detect any such cases. From what I have heard, this gives rise to many a false case got up by unscrupulous subordinate officers, either for the sake of reward

or to please their superiors. Many an unhappy creature is even sent to jail I understand.

No such reward should, in my opinion, be offered nor any pressure should be brought to bear upon the excise subordinates, save only that of thorough and frequent supervision.

63. No objection.

64. No.

65. Is quite reasonable.

67. No.

68. There are shops for the sale of these drugs where may be found many consuming them on the premises. I have objection to people smoking them on the premises of a shop.

69. Wishes of the people are not consulted before a shop is opened. But local public opinion ought to be consulted.

173. Evidence of BABU GIRJAPAT SAHAI, Kayasth, Zamindar, Patna.

1. Brahmins and other caste people being asked informed me.

2. Dr. Prain's remark appears to be correct.

3. In Tirhut bhang grows spontaneously.

4. I don't know.

5. Not known.

6. Dense.

7. No cultivation here.

8, 9, 10 and 11. Not known.

12. Wild hemp is not cultivated for the production of ganja.

13. It is not restricted in this province.

14. Not known to me.

15. Method of preparation is not known to me.

16 and 17. Not known.

18. Quite ignorant of that.

19. Ganja is used for smoking. Bhang is used in drinking, eating, and worshipping Siva. No other use.

20. Fakirs and sadhus generally smoke ganja in all the localities.

21 and 22. Not known.

23. Bhang is never used for smoking.

24. Almost all the Brahmins and other caste also, but rarely. In all districts in Behar.

25. To my understanding it is on the increase.

26. Unable to give any reply.

27. Brahmins generally take bhang, which they say helps in their devotions.

28. The average expenditure for each person of excessive consumer per day is two annas and that of moderate two pice.

29. Round pepper with bhang is generally used. Dhatura is never used with bhang.

30. Bhang is generally used in solitude. Male sex of mature age, not children.

31. Those who are habituated from a long time, it is very difficult for them to give it up at once.

Men beginning with small quantity afterwards take large quantity.

32. In Siva Puja all Hindus are bound to offer bhang to the idol. It is also used in medicine.

33. Not known.

34. It would be a serious privation if the drug be prohibited regarding the priestly classes.

35. To prohibit the use of the drugs will produce great inconvenience to the people as well as discontent.

The prohibition can be enforced by raising the price of these drugs, whereupon the consumers shall be obliged to diminish the quantity they take. This will tend to remove them from such habits.

36. Alcohol is never a substitute for it.

37, 38, 39 and 40. Not known.

41. (a) Bhang and ganja help digestion.

(b) Bhang and ganja make men indefatigable.

(c) Not known.

Labouring classes generally use them for those purposes, and we generally give bhang and gur to our horses when overworked.

42. Moderate use of bhang is harmless, since it gives necessary stimulation.

43. I have never seen any ganja and bhang smoker or drinker to be offensive to his neighbours.

44. It creates appetite, and the effect lasts for five or six hours.

45. (a) Ganja produces noxious effects physically and mentally, but not morally.

(b) It does impair.

(c) No.

(d), (e) and (f) Not known.

47. It is not a hereditary habit. It never affects children.

51. No.

53. It never incites unpremeditated crime. It never excites to homicidal crime.

54. No.

55. No stupefaction is caused by these drugs.

57. Not known.

58. I am quite ignorant of the present system of excise administration, and therefore cannot give any opinion.

62. The cultivation should be controlled by levying exorbitant taxes on the cultivators.

63. The only improvement I suggest is to tax heavily.

65. Taxation on all the intoxicants should be trebled.

66. I do not know its kinds, so I cannot suggest any opinion.

68. In this province we have shops for sale of these drugs. No houses. In my opinion shops should be allowed on heavy taxes.

69. I have never been consulted.

174. Evidence of BABU RADHIKA CHURN SEN, Kayasth, Zamindar, Berhampur.

1. I have seen people of the upper grades of society, who have renounced social ties and have become ascetics, as well as other people, accustomed to hemp drugs. From accidental informations received from them on the effects of its use, I am able to write so far as I now recollect.

3. Hemp plants (siddhi) grow self-sown in neglected parts of the garden, on the slopes of a tank, and on damp soils not much exposed to sun. My knowledge on the matter is confined within limited areas in our district.

6. Wild hemp grows dense.

11. I believe not.

14. Ganja is prepared in Balughara, which is, I believe, in the confines of Dinajpur, and in Naogaon in Rajshahi.

16. Bhang may be prepared from wild plants, but not so with regard to ganja and charas.

18. Yes; they do. I think they keep good with ordinary care up to three or four years. Damp causes deterioration. Bhang may be preserved a longer period, and old bhang is preferred to raw or new bhang for medicinal purposes.

19. I believe ganja is sometimes used for medicinal purposes. Ganja is powdered and mixed in oil with other ingredients, which is boiled, and is then used as a cure for some skin eruptions. *Cannabis indica* is another medicine administered in cases of hæmorrhage.

20. Ganja was pretty extensively in use in our district in former times, but not so now.

21. Flat and round kinds are preferred.

23. Bhang is never used for smoking.

24. In Muttra, Brindaban, people in general drink bhang. Some thrice, some twice, and others once a day. It is more prevalent in up-country than in Bengal or Southern India, where people of all classes more or less drink it. It is said to keep the body cool in hot weather and a proof against exhaustion from too much perspiration.

27. Generally low classes of people smoke ganja. It is supposed to have the power to sustain labour. Sanyasis, with few exceptions, are addicted to this habit. To guard against the influence of climate as well as to enable them to concentrate their thoughts in the contemplation of the divinity, which is a condition dependent upon the suspension of mental activities, they take to ganja smoking.

28. (a) From two to three pice a day.

(b) From six to eight pice a day or more, say, three to four annas.

29. Tobacco is mixed with charas and ganja for smoking.

Black pepper and aniseed are ordinarily used as bhang massala, and in hot weather well-to-do people put (khira) dwarf cucumber seeds, khur-booza seeds, cardamom, and cloves; also sugar and other palatable things, such as milk, with saffron, in the beverage.

30. Children do not use these drugs. Yes; it is confined to the male sex chiefly.

31. I think the habit is easily formed. It is not so difficult to break off the habit as in the case of the opium. I think the tendency towards the habit becoming excessive is common in all inebriating drugs and drinks.

32. There are no social or religious customs that I know of in which ganja or charas is in essential use. Bhang is drunk on the fourth day of the Durga Puja in moderate doses. But is not essential. It is optional.

33. The consumption of these drugs is certainly held in disrepute. People addicted to the use of these drugs are regarded as idle and worthless. Sanyasis (ascetics), who smoke ganja, are not looked upon in the same bad light. They belonging to a privileged class, the odium does not approach them. There is no custom that I know of, at least in Bengal, where hemp plants are worshipped.

34. In the case of boatmen and Muhammadan labourers, who on Ramzan days are wont to fast, they are accustomed to smoke ganja in order to sustain their powers as a labouring class. I think it would be a serious privation to interfere with their habits. The same will be the case with the ascetic class.

35. Charas, I think, is not of so extensive an use as the other two, and it can be easily checked. Bhang is used by persons subject to chronic dyspepsia and looseness of the bowels. But they are exceptional cases. In Muttra, Brindaban, and in other parts of the North-West it is in extensive use, where a prohibition would occasion serious discontent. A sentiment of high respect is entertained for sanyasis by all classes of people, and a discontent reaching them by such an interdiction is, in my opinion, likely to extend to other classes, which might in time amount to a political danger. In the Punjab I think ganja is more extensively consumed than in other parts of the Continent, and there are many Punjabi ascetics whose influence upon the people of their presidency is perhaps greater than those in others, and an interference in their habits might result in a serious danger.

The prohibition might lead to alcoholic drinks.

36. Lower class people now-a-days indulge in drinking country wine to a greater extent than formerly. I think the increase of wages is one of the causes.

38. Chur ganja is less strong than the other two, and the effect of the former is proportionally less.

39. Bhang drinking is much less injurious than smoking charas or ganja.

40. I have stated about the medicinal properties of bhang and ganja that I know of in my answers to some of the foregoing questions.

41. (a) Bhang is used by some as a food accessory.

(b) Ganja is smoked to give staying power, etc., etc., etc.

(c) Supposed to safeguard against the influence of climate. Moderate habitual use is supposed to attain these objects.

43. They are so.

45. Ganja and charas impair the constitution ultimately.

In the cases of excessive consumers ganja causes sometimes dysentery.

It does seldom impair the moral sense, and is not calculated to create immorality or debauchery, but to some extent it induces laziness.

Ganja in some cases produces insanity, and the symptoms are likely to be reinduced by the use of the drug after abstinence. The consumers perhaps do not admit it.

This is a difficult question to answer, for I have known persons who are excessive consumers of ganja to be of jovial temper. I have knowledge of a Sub-Judge, who had a good reputation of his judicial capacities, a more than a moderate consumer of ganja, and who retired from service on full pension, and lived to a good old age.

I have also known persons who have turned insane by ganja smoking, and it is quite possible that persons predisposed to insanity on account of weak intellect and weak health, incapable of keeping the use of the drug within moderate bounds, have developed into insanity.

47. My answer is in the negative.

49. I have no knowledge of the drug being used

as an aphrodisiac. I think it has a tendency to produce impotency in some cases.

51. I think not. So far as my experience goes, I don't think the use of this drug tends to produce a passion for crimes in general or special.

52. Excessive use of ganja has the effect of fortifying one in the commission of bold and rash premeditated acts of crime. The same might be said with regard to alcoholic drinks.

53. My answer is in the negative. I do not know of any case in which it has led to such a frenzy.

54. Criminals who are accustomed to the use of ganja do use it for such a purpose.

55. Complete stupefaction does not result in ganja without admixture of dhatura, etc.

57. I know of no case wherein ganja or charas is eaten or drunk pure or simple. But small pastry cakes are made of siddhi and small square bits prepared of the same drug mixed with sugar and other spices, which are eaten, and which produce a more severe effect upon the consumer than when used in a liquid form. In some instances ganja in small doses is mixed with bhang and drunk. But such instances are rare. It may be found amongst veteran bhang consumers in the North-West, and Marwaris upon whom bhang fails to produce the desired effect.

65. In my opinion alcoholic drinks are more injurious in their effects than the use of these drugs, and the former ought to be more heavily taxed.

68. There are no such places that I know of.

175. *Evidence of BABU RUGHU NANDAN PRASADHA, Zamindar, Patna.*

1. So much of my information as is not personal has been derived from consultation with the consumers as well as my zamindari thikadars, shop-keepers, and other members of the middle classes.

2. The definitions as given by Dr. Prain may be accepted for the province of Behar as correct. Besides those mentioned, another name for bhang, not mentioned by Dr. Prain is "boonti," and is current in this Province. Ganja and charas are known only as ganja and charas. The varieties of ganja are three, as mentioned by Dr. Prain: flat ganja is known in this Province as "pamure," round ganja as "gol" or "chur," and broken ganja as "rorha" or "chur."

3. The hemp plant grows wild in the districts of Shahabad and Champaran and also Monghyr and Bhagalpur, and rather abundantly in Malda.

6. The plant in its wild state generally grows in dense patches.

8. The plant is cultivated to some extent in the districts of Patna and Muzaffarpur, and to the best of my information there has been no marked increase or decrease in the area under cultivation.

9. Sometimes in March, April, and occasionally even earlier, the land is ploughed from four to ten times for the purpose of freeing it from all weeds, it being a belief that land for hemp cannot too often undergo the process. In May, after the first shower of rain, a nursery for the rearing of seedlings is formed on high land of a light sandy loam. The plot is repeatedly ploughed, and, if need be, harrowed, until by August the soil has been completely pulverised. On a sunny day the

seed, some four or five seers to the bigha, is sown broadcast; and by the latter end of September the seedlings are from 6 to 12 inches high, when they are simply pulled up by the roots, and put down 6 to 8 inches apart on the ridges the same day. Towards the end of October the ridges are opened out, manured with oil-cake and cow-dung, and then reformed, freshly manured soil being thrown up round the roots of the plants. In November the lower branches of the plants are lopped off to promote the upward growth of the shoot; the ridges are redressed and manured, the furrows ploughed, and weeds removed. The crop of the hemp plant is harvested in February and March.

19. Charas is never used for any other purpose, but smoking ganja is sometimes used by Ayurvedic physicians in the preparation of medicated oils for various diseases.

20. The use of charas in this province may be perhaps found to be more prevalent among low classes, especially in the larger towns, than among any other section of the population. The use of ganja is not confined to any particular class or to any particular locality, but there are sects of religious mendicants who are habitual and even excessive smokers. Among other classes which use ganja may be mentioned agricultural and day-labourers, palki-bearers, fishermen, boatmen, and dhobies; but votaries of the drug may also be found even among the respectable middle classes.

21. Chur ganja is preferred as having the strongest intoxicating properties over the other two varieties—flat and round.

22. Charas imported from Dacca and the Punjab is used in this province. Herat charas is, however, considered the best, and is also imported to some extent.

23. I have never known bhang being used for smoking. Probably it is never so used.

24. Bhang is generally used by the classes to whom the use of spirituous liquors is prohibited on religious grounds, such as Brahmins, Kshetriyas, and other higher castes. Ninety per cent. of the pandas or spiritual guides attached to the temples of Baidyanath, Deogurh, and Gaya in Behar are as a class addicted to the use of bhang. Bhang is also largely used by native Hindu sepoys.

25. My observations lead me to believe that there has been latterly a decrease in the consumption of hemp drugs, especially bhang, of which the use among the intelligent middle classes is being supplanted by the illicit use of alcohol. In the case of ganja and charas, increased duty as well as facilities for obtaining cheap liquor, may account for diminished consumption.

26 and 27. Generally speaking, I may state that in this province the habitual excessive consumers of ganja are the sadhus or peripatetic religious mendicants; the habitual excessive consumers of bhang are the pandas or spiritual guides attached to the temples at Baidyanath and Gaya and other similar temples. It is impossible for me to ascertain their proportion to the total body of the consumers of these two drugs; but I believe upon enquiry it would be found that the proportion of all habitual excessive consumers to the total of consumers is not a very high one. As a rule all those who use these two drugs to overcome fatigue, to avoid the evil effects of exposure, and as a stimulant after a hard day's work are habitual moderate consumers. From the fact that sadhus and pandas, as above mentioned, are habitual excessive consumers, it may be inferred that idleness and immunity from worldly cares as to the provision of the necessities of life, combined with the notion that the two drugs are helpful to the concentration of mind for religious purposes, are important factors which lead to habitual excessive use. Another factor in the cases of others, though not a numerous class, may be found in the desires for a stimulant for their purposes of sexual pleasure.

28.

NAMES OF DRUGS.	Average allowance per diem.	Class of consumers.	Costs.
Bhang	Half a tola to five tolas	Habitual moderate	Half anna to two annas.
"	One chittak to two chittacks	Habitual excessive	Two annas to four annas.
Ganja	75 grains	Habitual moderate	One anna and a half
"	800 grains	Habitual excessive	About III annas.

29. The ingredients ordinarily mixed with bhang are dried rose leaves, black pepper, rose water, keora, aniseed, almond, cardamon, sugar, and other spices to improve the taste. Dhatura is sometimes mixed with it by those whom bhang by itself fails to intoxicate. A small quantity of dried tobacco leaves is probably the only ingredient which is ordinarily mixed with ganja. A preparation called bhang massala is sold in the bazar.

30. The consumption of hemp drugs is practised both in solitude and in company. Those who

are habitual moderate consumers would generally prefer solitude. Occasional excessive consumers almost generally indulge in company. There is no particular time of life to which the use of the drugs is confined; they are used from adolescence to extreme old age. Women and children generally and as a rule do not indulge in hemp drugs. A few women of the town may be found to indulge in bhang, but probably none in ganja or charas.

31. Habit is not easily formed, but when formed it is difficult to break off, and then deprivation of the drugs produces physical prostration. The moderate habit does not necessarily develop into the excessive.

32. The use of intoxicants, spirituous liquors, and bhang particularly among hemp drugs is an old institution during the Holi or the carnival of the Hindus. Classes which do not use, or are prohibited from using, spirituous liquors indulge freely in bhang and sweet cakes made with bhang, technically called majum. The custom is to offer something intoxicating to every visitor to your house on that day, and an important part of the functions of the festival is to receive visits from friends and to visit them in turn, so that by the time night comes, a vast deal of intoxicants is consumed by the revellers.

Bhang or ganja or charas, of course, is not essential to the Holi from a religious point of view, but what is of more importance it is customary, and custom has in this country all the force of religion.

The use of these drugs on this occasion is of course excessive; it is injurious as all such excesses are injurious on account of the temporary physical prostration it brings about as a reactionary effect, but it does not commonly lead to the formation of habits.

33. There is a public opinion with regard to the use of these drugs. For instance, the use of bhang is not regarded as a social sin, while the use of ganja and charas among the higher classes is considered disreputable, although their votaries are not punished by ostracism or in any other way. Among the lower classes their use is not in any way considered reprehensible.

I am not aware of the existence of any custom of worshipping the hemp plants, but bhang and ganja are sometimes placed as a native offering at the shrine of Siva.

34. It would be a privation to the habitual consumers to forego the use of the drugs. To the sadhus it would be a serious privation, for the drugs are said to exert a helpful action in the practice of what is called "hatha yoga," or the regulation of breath by systematic postures for the purposes of the concentration of mind. But in all cases there would be privation more or less after the habit is formed; for I consider that the habit of indulgence in intoxicants, whether hemp drugs or spirituous liquors, after it has been decidedly formed, produces a peculiar state of the nervous system, which becomes then almost natural to the man, and when the influence of the intoxicants is all at once withdrawn that system collapses.

35. I think it is possible to prohibit the use of charas, at least in this province. Charas is used by comparatively speaking a very small number of men; it is but rarely, if ever, imported into villages, and those who do indulge in it are not a very respectable class, or one from whose discontent any political danger can possibly arise.

There is no likelihood in the case of charas of its being illicitly used. Charas is not made in this province; it is imported in small quantities from distant places; the price is higher than that of the other hemp drugs; and after its use is prohibited, it is likely that the demand would cease, or would be so small as not to make it any body's worth while to risk the dangers of smuggling.

The case is different with bhang and ganja. In the first place, the consumers are a much more numerous class, including the sadhus who are notoriously held in reverence by the masses; and as the prohibition would soon come to be regarded as an interference with the liberties of those sadhus who are also religious teachers, a colorable interpretation might be put upon the prohibition as being interference with religion itself. This would be a political danger undoubtedly. In the second place, I do not think it would be practicable to prevent the illicit use of bhang at any rate, as it grows wild in the province; and nothing short of an army of excise men would be able to enforce the prohibition; while, on the other hand, the enforcement of such prohibition by the medium of under-paid men would naturally become inquisitorial in its character.

It is more than possible that the prohibition would be followed by recourse to alcoholic stimulants and in a smaller number of instances other drugs like nux-vomica and dhatura.

36. I believe so, and I attribute the fact to the growing fashion among the English educated classes of indulgence in alcoholic stimulants. Alcohol is now much more consumed in an illicit manner by members of classes to whom its use is socially or religiously prohibited than was the case fifteen years ago. Numerically such consumers may be very small, but the fact is there all the same, and indicates that while Western education has the tendency to obliterate ancient customs and many social restraints as superstitious, it does not always provide healthy substitutes for them.

39. Rather the contrary. The general belief is that the smoking of the hemp plant is more injurious than the eating or drinking of the same. Excessive ganja smokers are greater sufferers in health than excessive bhang drinkers. In the case of the former the evil effects appear sooner than in the case of the latter. Cases of excessive bhang drinkers are known who have lived up to old age as not suffering materially in health owing to their habit, while excessive ganja smokers sooner or later contract diseases of the chest or the brain. It is, however, unsafe to generalise from a limited number of instances, but the popular belief is that eating or drinking is the better form of using hemp drugs than smoking them.

40. Bhang is used in the preparation of several Ayurvedic medicines; it is also frequently drunk alone or in combination with suitable drugs for the removal of hæmorrhoids and constipation. In the treatment of cattle diseases it is also used largely. Ganja is used by Ayurvedic physicians in the preparation of several kinds of oils for external application.

41. The moderate use of bhang may be beneficial in its effects—

- (a) As a food accessory or digestive. Under the influence of bhang a larger quantity of food, especially of a saccharine and starchy kind, can be consumed and digested, and this effect is popularly well-known.
- (b) Moderate use of ganja may be beneficial

in its effects to give staying power under severe exertion or exposure or to alleviate fatigue. The immunity of sadhus from the evil effects of exposure to which they are extremely liable is attributed to the use of ganja. I have known members of this class to sit all night on the bank of the Ganges or any equally exposed place in the coldest month of the year without any shelter over their heads or any cloth to cover their bodies except a narrow strip of loin cloth, and to bear this extraordinary exposure with impunity by taking chillum after chillum of ganja. Dhobies, boatmen, and fishermen, who have constantly to be out in all sorts of weather, and to be always coming in contact with water, attribute to the use of ganja their escape from the evil effects of the exposure. As an alleviation of fatigue I have seen palki-bearers tramp for ten miles with their unsightly machine and its occupants in the hottest sun, and at a brief break perspire like horses and look utterly exhausted, but after a chillum or two of ganja had been passed round they would tramp for another ten miles like a relay of fresh animals.

The latter part of this question is answered by what has been stated above. I refer to moderate habitual use for the purposes of (a) and (d), and to moderate occasional use for the purposes of (b) and (c).

- (c) As a febrifuge or preventive of disease in malarious tract, it is well known that sometimes a draught of bhang taken a few hours before the "paroxysm in tertian quotidian" and other kinds of malarial fever cuts short the attack, and it is not uncommonly used for this purpose.

- (d) In any other way, as stated elsewhere, sufferers from hæmorrhoids and habitual constipation find a daily use of a moderate quantity of bhang extremely beneficial in alleviating and even curing their complaints.

43. Undoubtedly.

44. The immediate effect of the moderate use of bhang on the habitual consumer is an exaltation of the physical powers. The effect is refreshing as well as intoxicating. The drink does not allay hunger; rather it increases the appetite. The effect may last up to twelve hours or more. There is no after effect, so far as I am aware; but as the times come round when it is habitual for the consumer to take the draught, there does arise a sort of craving for it, and if it is not forthcoming uneasiness follows.

45 and 46. So far as my observations go, they do not follow any noxious moral effects from the habitual moderate use of the hemp drugs nor from habitual excessive use.

The physical effects of the habitual moderate use of bhang lead to longevity in popular belief; at any rate, the effects are not harmful physically, but habitual excessive use is harmful physically.

I believe the effects of a moderate use of bhang on the mental faculties are to produce partial stupor or sluggishness in their action. Of excessive habitual use the mental effects may be partial idiotcy and melancholia.

Ganja is physically harmful even in moderate quantities if taken habitually. Sooner or later it produces chest or brain complaints. If used in excessive quantities, these complaints are produced more rapidly. But cases may be found of moderate consumers who escape any harmful physical consequences with impunity. These consequences are undoubtedly hastened and aggravated by want of rich farinaceous and oily foods, and, on the other hand, if not wholly prevented, considerably delayed by the use of such foods. On the mental faculties the effects of ganja, unlike those of bhang, are rather exciting than soporific. Cases of insanity are known to have arisen from even the moderate use of the drug.

I am not aware of any case of the perversion of the moral faculties from the habitual moderate or excessive use of the drug.

47 and 48. In my opinion the habitual moderate or excessive use of hemp drugs does not lead to children being born with potential germs of the habit in them unlike the children of dipsomaniacs. As to any other effects of the parental habit, if the parental constitution is impaired by it, then children are naturally weak and unhealthy, but similar children are born of parents whose constitutions are impaired from any other cause.

49 and 50. Bhang in moderate quantities, and often mixed with other drugs, is used as an aphrodisiac, also by prostitutes; but to my knowledge it is not more injurious when used for this purpose than when used for its narcotic properties. Cases of loss of virile power, partial or temporary, following the excessive use of the drug as an aphrodisiac may be found.

51 and 52. So far as my observations go, I do not believe that any large proportion of bad characters are habitual moderate or excessive consumers of hemp drugs, nor does there appear to be any special connection between crime and these drugs.

53. Excessive indulgence in these drugs may lead to the committal of unpremeditated crime, but then it would be properly due to temporary insanity caused by such indulgence. I am not, however, aware of any instance of it or of the use of homicidal mania following the excessive indulgence of hemp drugs.

54. I am not aware of any of these drugs being used by criminals for the purpose mentioned in this question.

55. I believe some instances may be found in the records of our police courts of the use of these drugs by criminals for the purpose mentioned in this question. Complete stupefaction may be produced by excessive doses of the drugs in persons not habituated to them, but various degrees of helplessness, short of complete stupefaction, may be enough for the purposes of the criminals.

I do not, however, believe that such cases are very common.

56. In moderation, the effects of bhang are modified for the better by the admixture of cooling stuff like rose leaves, rose water, keora, aniseed, almond, the seeds of different kinds of melon and cucumber, etc., etc., etc. These substances have the tendency to counteract the excess of laryngeal dryness and constriction which bhang alone would produce. As a rule, no such substances are mixed with ganja; only a little dry tobacco leaves is all that is mixed with it. Excessive consumers of bhang do sometimes mix dhatura seeds with their draught, because bhang alone after a time fails to intoxicate them sufficiently.

57. I am not aware that ganja or charas is ever eaten or drunk.

NOTE.—Not having sufficient information as to the existing system of excise administration in regard to hemp drugs, I do not consider myself competent to venture with any criticism or suggestion, or answer the questions under this chapter.

Oral evidence.

Question 1.—My answers were written by a schoolmaster. I gave him a general sketch of my opinions and he wrote out the answers in his own words.

Question 35.—Ganja is produced in this country from the wild plant, but it does not come into use, because Government causes it to be destroyed. There may be very occasional illicit consumption. There is a little hemp grown in people's yards and fields, and it will be very difficult to put a stop to it. A person is not liable to punishment for allowing the plant to grow in his ground if he does not cultivate it, or if the intention of using it as ganja cannot be established. If the existence of small plants in such places were made penal, a good deal of oppression would result. If Government issues an order that the hemp plant is to be extirpated in occupied lands, it will be carried out.

My statement that prohibition might be regarded as an interference with religion applies only to the followers of the Shaiv and Shakti sects.

Question 42.—It is the opinion of Hindu physicians that fever and ague are beneficially treated with bhang. I have seen cases in which it was given, but I have never taken it myself.

Question 45.—In saying that there are no bad moral effects from excessive use of hemp, I mean that it does not lead to noisy behaviour, abuse, and fighting as the use of alcohol does. I have only seen a very few excessive consumers. Insanity arises from the excessive and not from the moderate use of the drug.

176. Evidence of BABU NUNDO LAL GOSSAIN, Brahmin, Zamindar, Serampore.

1. My informations are derived from enquiries carefully made of the tenants of my estates, and as to Hughli District both of the tenants and licensed shopkeepers of hemp of all kinds.

2. The definitions given in question 2 may be accepted as correct. They are known in and about Serampore as siddhi or bhang, charas, and ganja.

3. The hemp plant grows spontaneously in all places in Lower Bengal. It is grown abundantly

in the districts of Rajshahi, Bhagalpur, and next to it in Jessore.

5. It is said that damp soil is favourable to the growth of hemp.

7. In the province of Bengal the hemp plant is cultivated in the district of Rajshahi and in some parts of Jessore. There is large cultivation of hemp plant which produces ganja in the two aforesaid districts. In Behar the species of hemp which produce siddhi are cultivated largely.

10. The persons who cultivate hemp for its narcotic properties do not form a special class. The cultivators of Rajshahi and Jessore are mostly Muhammadans.

13. Hemp plant is grown in the districts of Rajshahi and Jessore. Damp soil favours the growth of hemp from which ganja is produced.

16. Bhang is not generally prepared by the people in their houses. Leaves of wild male hemp do not make good bhang, and are seldom used. Ganja and charas cannot be prepared from the wild plant wherever grown.

18. All the three drugs (ganja, charas and bhang) deteriorate by keeping for more than about six months. They lose their effect in time. If kept in well covered receptacles, and exposed to the sun from time to time, deterioration could be prevented. In fact, it is so done at present by the licensed vendors.

19. Ganja and charas are used only for smoking.

20. Cultivators, fishermen, night watchmen, ascetics, musicians, and other people whose occupations involve hard bodily labour or exposure to inclemencies of the weather are generally addicted to smoking ganja, and in a very small percentage of cases charas. Some even of the better class of people smoke ganja and charas. Amongst the better class of people the habit is more prevalent in Behar than in Lower Bengal. The use of charas is declining amongst all classes of the people given to smoking hemp.

21. The round species of ganja are preferred for smoking.

22. The charas of Nepal and Gorakhpur is chiefly used.

23. Bhang is very seldom used by more than a very small number for smoking.

24. Bhang is eaten and drunk mostly by the up-country people. In Lower Bengal it is used by a very small percentage of the people of all classes.

25. The use of charas has very much decreased, but the use of ganja and bhang is on the increase. The reasons of the former, so far as I have been able to ascertain, are (1) the higher price of charas as compared to that of ganja; and (2) ganja is considered a more lively intoxicating agent than charas. The reason of the latter is that both ganja and siddhi are used as a cheaper and less harmful substitute than spirituous liquors.

28. (a) Habitual moderate consumers require quarter to half anna worth each.

(b) Habitual excessive consumers one anna to two annas worth each.

29. Ganja is usually mixed with tobacco leaves. Bhang massala consists of poppy seeds, petals of roses, seeds of cucumber, aniseed, and pepper.

30. In Lower Bengal ganja and charas are rarely smoked by women or children. The use of all the three drugs is mainly confined to the male sex.

31. The habit of smoking ganja and charas is not easily formed. The habit of eating or drinking bhang is easily formed. When the habit is

contracted it is difficult to break off. There is not very great tendency in the case of any of these drugs for the moderate habit to develop into the excessive,—not to that extent as in the case of spirituous liquors.

32. In Lower Bengal bhang is drunk by the Hiudus on the day that the image of Durga is consigned to the water, which is generally called the Bijoya. This is partly religious and partly social custom. The use of bhang on that day is temperate. Surely this does not lead to the formation of the habit, nor is it injurious in any way.

33. The habitual use of these drugs has been always deprecated. There is no custom of worshipping hemp by any sect of the people so far as I know.

34. It would be a serious privation to several classes of consumers if they are forced to forego the use of these drugs.

Persons whose occupations constantly expose them to inclemencies of weather, or who have to be in water for a long time or to keep up nights or who work in water-logged and swampy places, find in the use of these drugs sufficient protection from the dangers which their hard lives expose them to. Their number is large.

40. The kabirajes or native doctors use ganja and bhang in the preparation of some of their medicines. Bhang is also used in the treatment of cattle disease.

41. Moderate use of ganja and bhang is beneficial as giving staying power under severe exertion or exposure, as alleviating fatigue, and as febrifuge; they possess also medicinal virtues. Bhang is believed to be beneficial in cases of chronic diarrhoea.

42. I consider the moderate use of these drugs to be harmless for the reasons stated in my answer No. 41.

43. The moderate consumers of these drugs are never known to be offensive to their neighbours.

44. The immediate effect of the moderate use of these drugs on the habitual consumers is that it is refreshing. They do not intoxicate the habitual consumers. They do not allay hunger, but are believed to be good appetizers. The effect of these drugs lasts about three or in some cases four hours.

45. The habitual moderate use of these drugs does not impair the constitution or injure the digestion or cause loss of appetite or impair the moral sense.

Excessive use of these drugs deadens the intellect, and sometimes produces insanity.

51, 52, 53. There does not appear that any special kind of crime or crimes in general has any connection with the use of these drugs, either moderate or excessive. I know of no case in which the use of these drugs has led to temporary homicidal frenzy.

68. There is no licensed house for smoking ganja, bhang, and charas. There is license for shops for the sale of these drugs.

69. The wishes of the people are not consulted before a shop is opened in any locality; nor does it seem to me to be necessary to do so.

177. *Evidence of GOSSAIN MOHENDRA GIR, Sanyasi, Zamindar, English Bazar, Malda.*

1. These answers have been framed upon information obtained from smokers, consumers, and dealers of hemp drugs.
2. These definitions may be accepted for this district, except that round ganja is not prepared by rolling under foot, but it is rolled by hand, and that the dry leaves of the hemp plant is also called "bijoya." These products are locally known by the names given in paragraph 2.
3. In this district, the hemp plant grows spontaneously. It grows also in hilly districts.
4. The hemp plant is known by the names of ganja and bhang. The plants which do not flower are known as bhang.
5. Not known.
6. The growth is ordinarily dense.
7. Not in this district.
10. No, they do not form a special class.
13. The cultivation of the hemp plant for ganja is not restricted in this province.
14. So far as it is known, ganja is only prepared in this province, and in Rajshahi District. The extent to which it is prepared is not known.
15. Some drink bhang by grinding it with pepper, sugar, milk and water, and some swallow it with water. Ganja is generally smoked by mixing with tobacco leaves.
18. Ganja and bhang do deteriorate by keeping. They lose their effect in time. They keep good for about a year. The causes of deterioration and the measures to prevent it are not known.
19. Ganja and charas are used only for smoking.
20. Mostly the lower classes of people smoke ganja. Members of the upper classes smoke it but rarely; sanyasis smoke it as a rule. Charas is not used in this district.
21. The flat ganja is preferred for smoking. The people inhabiting the Eastern portion of the province prefer round ganja, and those that live in the West prefer flat ganja.
22. Not known.
23. No.
24. All classes of people drink bhang in cases where opportunity is not got for drinking. Recourse is had to eating also. The people inhabiting the Eastern portion of these provinces are less addicted to it than those who live in the West.
25. The use of ganja is on the decrease. The reason is, therefore, attributable to the high price. Nothing is known as to the use of charas and bhang.
29. Tobacco leaves are ordinarily, and powders of sandal wood are occasionally, mixed with ganja. Sugar, rose, seeds of cucumber, pepper, mohuri, ice, elaichi, milk, badam, posto-dana are occasionally, and mohuri and pepper are ordinarily, mixed with bhang. Dhatura is seldom used. Tobacco leaves are mixed with ganja for preventing cough, and powders of sandal wood are mixed for perfuming the ganja. The ingredients that are occasionally mixed with ganja are for the purposes of luxury, and the ingredients that are ordinarily mixed with bhang are for cooling purposes. The answer of the second paragraph of this question is not known.
30. These drugs are consumed both in solitude and in company, but their extent is not known. Yes, it is mainly confined to the male sex. The practice is not limited to any time of life. It is not usual for children.
31. The habit of consuming ganja is easily formed but it is not the case with bhang. As regards charas, nothing is known. Yes, the habit of smoking ganja is difficult to break off. There is a tendency in case of all the drugs for the moderate habit to develop to the excessive.
32. There is no custom, either social or religious, in regard to the consumption of any of the drugs. The answer of the remaining portion is not therefore necessary.
33. The consumption of these drugs is generally regarded as degradation. In public opinion, the practice is condemned. As they are intoxicating drugs, their use is considered disreputable. There is no such custom of worshipping the hemp plant.
34. It would be a serious privation to the consumers of these drugs to forego their consumption. It would affect the health of the consumers. The answer of the last portion is not known.
35. It is not feasible to prohibit the use of any or all of these drugs. The drug would be consumed illicitly. If the price of the drugs be considerably raised, the prohibition may be enforced. The prohibition would occasion discontent among the consumers. The discontent would not amount to political danger. The prohibition may be followed by recourse to other drugs.
- 36, 37, 38 and 39. Not known.
40. Not known. The bhang is used in the treatment of cattle disease.
41. (a) The moderate use of ganja, bhang and charas is beneficial in effects as digestive and as a remedy against cold.
(b) To give a staying power under severe exertion and exposure, and alleviate fatigue.
- Lower order of people generally use these drugs for the above purposes, but their proportion is not known. The moderate habitual use of these drugs is referred to here.
42. Not necessary.
43. Yes.
62. There is no necessity of putting any control over the cultivation of the hemp plant for the production of bhang.
69. The wishes of the people are not consulted before a shop is opened in a locality. The local public opinion ought to be consulted.

178. *Evidence of BABU KALIKISTO SARKAR, Kayasth, Talukdar, Kasundi, Jessore.*

1. By enquiries.
2. Yes, the definitions given by Dr. Prain may be accepted. It is known by the name as given by Dr. Prain.

3. Jessore. I am not aware of the particular locality where it is abundant.

4. It is known only as wild bhang.

5. As far as I know, wild hemp generally grows in a little dry and high land.

6. The growth of the wild hemp in this district is not ordinarily dense, but scattered.

7. There is no cultivation of hemp plant in this district now, but I am informed that formerly in Kotchandpur in the sudder sub-division of Jessore there was cultivation of hemp plant.

8. Nil.

9. I have no experience of the method of hemp plant cultivation.

10. I am informed that people who cultivate hemp plant are of the same class as the other agricultural cultivators.

11. As far as I know, plants cultivated for the production of ganja are never raised from the seeds of the wild hemp.

12. No.

13. As far as I know, in the lower province of Bengal hemp plant for ganja is only cultivated in the Naogaon sub-division of the Rajshahi District and in some parts of the Bogra District. I am not aware why these two districts are selected. No, the cultivation is not common to all districts. I am not aware if there are any special conditions of climate and soil, etc., necessary for the cultivation of hemp. I am not also aware if there is any part in this province where its cultivation would be impossible.

14. In the Jessore District neither ganja nor charas nor bhang is prepared.

15. I am not aware.

16. In the Jessore District bhang is not prepared by the people in their houses. Yes, as far as I am aware, bhang can be prepared from the hemp plant wherever grown. No, neither ganja nor charas can be prepared from the wild plant wherever grown.

17. By people of the cultivating class.

18. I am not aware.

19. Ganja and charas are generally used for smoking, but sometimes ganja is used for medicinal purposes.

20. In the district of Jessore generally, people of the lower class, such as palki-bearers, domes, bagdis and buna-coolies smoke ganja, and their number is small. Sanyasis, baisnabs and fakirs also smoke ganja, but charas is not generally used in this district.

21. In the Jessore District, as far as I am aware, flat and chur are preferred for smoking.

22. I am not aware.

23. I am not aware that bhang is ever used for smoking.

24. Up-country people generally drink bhang.

25. The use of ganja, charas and bhang, as far as I am aware, is not on the increase.

26. In my estimation—

(a) habitual moderate consumers, 50 per cent;

(b) habitual excessive consumers, 5 per cent;

(c) occasional moderate consumers, 10 per cent;

(d) occasional excessive consumers, 2 per cent.

27. From the lower class of the people, such as bagdi, dome, and palki-bearers, etc., hard labour and keeping company with habitual smokers mainly lead to the practices.

28. In my estimation—

(a) to habitual moderate consumers, one pice per diem;

(b) to habitual excessive consumers, four pice per diem.

29. Dried tobacco leaves and tobacco leaves sweetened with molasses are often mixed with ganja to my knowledge. Dhatura is never so mixed. The object of these admixtures is to make the ganja a little more mild and sweet too. I know of no preparation which is sold for the purpose of being mixed with any of these drugs. With bhang I am informed that spices, such as cardamom, saffron and pepper, are used for drinking purposes. Milk and sugar are also mixed with it.

30. To a great extent these drugs are used in company, and to some extent these drugs are also used in solitude. No, lower class of prostitutes are in the habit of using these drugs. No; as far as I am aware it is not usual for children to consume any of these drugs.

31. Yes, the habit of consuming these drugs is easily formed, and it is also difficult to break it off when once contracted. No, not necessarily.

32. On the last day of Durga Puja, i.e., Dashami day, some people after their return home in the evening drink a little of bhang, and as far as I am aware the custom is never regarded as essential. It is always temperate. It is neither injurious nor is it likely to lead to the formation of habit.

33. The consumption of these drugs is not regarded favourably. There is a tradition that god Siva was very much addicted to the use of ganja and bhang, so people when they smoke ganja or drink bhang they have some religious sentiments, but as far as I am aware there is no social public opinion regarding it. I am not aware of any custom of worshipping the hemp plant. The use of ganja is to some extent in disrepute. It may be attributed to the fact that men of the higher class do not use it.

34. To some extent it would be a privation to people who are in the habit of smoking ganja if they are to forego the consumption of this drug.

35. In my humble opinion it would not be feasible to prohibit the use of these drugs. If it is so prohibited, there is every chance of the drug being consumed illicitly. There is also every chance of discontent among the consumers. Certainly these discontents would not amount to a political danger. In my humble opinion the prohibition would be followed by recourse to alcoholic stimulants and other drugs. The prohibition can be enforced by enhancing the present rate of duties.

36. No.

37, 38, 39 and 40. Not aware.

41. I am informed that the moderate use of bhang may be beneficial in its effect—

(a) as food accessory or digestive;

(b) to give staying power under severe exertion or exposure, or to alleviate fatigue.

(c) The moderate use of ganja, I am also informed, serves as a preventive of disease in unhealthy places like Ranpur, etc.

(d) I do not know in any other way. I am informed that 20 per cent. higher class of people use bhang for the above purposes and 90 per cent. of lower class of people smoke ganja in unhealthy places. I refer to moderate occasional use in regard to bhang and to moderate habitual use in regard to ganja.

42. *Nil.*

43. As far as I am aware, moderate consumers of ganja, bhang and charas are inoffensive to their neighbours.

44. The effect of the moderate use of bhang,

charas and ganja, I am told, is refreshing. It produces a little intoxication. Smoking of ganja allays hunger. Drinking of bhang moderately creates hunger. The effects of ganja last for about three or four hours, and that of bhang about 12 hours. I am not aware if the want of subsequent gratification produces any longing or uneasiness.

45. In my humble opinion habitual moderate use of these drugs does not produce any noxious effects, physical, mental, or moral. But when it goes to excess, the effect is quite the reverse.

This answer refers to question 46 also.

179. *Evidence of BABU JAGAT KISHOR ACHARJEA CHAUDHURI, Brahmin, Zamindar, Muktagacha, District Mymensingh.*

1. Being a zamindar in Mymensingh District and having occasion of touring almost all over it, I had direct intercourse with every class of people and had opportunity of acquiring personal experience about their habit of life and matters connected with the hemp drugs, in regard to which my answers are framed.

2. These definitions may be accepted for the district. Except flat ganja no other sort is known here. By the term bhang it is understood by this district people to be the dried leaves of a different kind of plant called bhang that grows up spontaneously all over the district, specially in hill quarters. It is not clear, as defined, whether these bhang plants are same as male ganja plants. Charas is only known here by name, but seldom used.

3. I do not know of any district where hemp (ganja) grows spontaneously.

4. I do not know of any other name by which ganja is called by the district people, though it has so many names in Sanskrit Lexicon.

5. I have no knowledge of what sort of climate, soil, rainfall, elevation that favour the growth of wild hemp.

6. I have no information about the matter.

7. Hemp (ganja) is said to be cultivated in certain parts of the Mymensingh District bordering the river Jamuna.

8. I have not much information about the matters in question.

9. I do not know much of the matters as asked in this question.

10. I have not much knowledge about the matters in question.

11. Ganja plants can be propagated from the seeds that are found in flat ganja.

12. I have no knowledge about the matters, as referred in this question.

13. I have no information about ganja beyond the district I live in.

14. (a) Ganja is not prepared in this district in a big scale.

(b) Chara is not at all prepared in Mymensingh.

(c) Bhang, as stated in my answer No. 2, is used by a very small majority, but it is not prepared as understood by the term. Some use the broken fragments of ganja which are sold by licensed ganja vendors. It is called patti or chur.

15. Ganja is generally smoked. Majum and other confectionery preparations of it are eaten. Both bhang and patti are drunk in shape of sherbet.

16. People generally prepare bhang in their own houses. It can also be prepared from leaves of ganja plants. I don't know any other plant from which ganja or charas can be prepared.

17. There are no particular classes that make preparations of hemp drugs.

18. Bhang and ganja, when grown old, lose their intoxicating power, and they grow useless after a year or so. It is said that damp and exposure deteriorate the intoxicating essence of bhang and ganja. Charas does not deteriorate so rapidly. It remains effective for years if not exposed to damp. Charas is also medicinally used.

19. I do not know whether ganja and charas are used other ways in general, besides smoking, though sometimes majum and other intoxicating confections are prepared by ganja. It is said that dhatura is sometimes mixed with ganja and put into it to make it more strongly intoxicating.

20. It is generally believed that more than half of the labouring section of the community and artisans mostly smoke ganja as a refreshment, either to stimulate them to the hard work they undergo in sun and rain or to drown their wearied limbs to repose. And now-a-days ganja-smoking has become almost general among those classes of people without any distinction of locality.

21. Flat ganja is sold in this district, and the people have no idea of other kinds besides it.

22. Charas is not much known in this district, and it is seldom used by this district people.

23. Bhang, as understood by this district people, is never smoked, but only used by a few in form of sherbet.

24. Especially the up-country people that reside in this district are addicted to the use of bhang as a drink, and there is no particular locality where bhang is drunk.

25. The use of ganja is, I believe, on the increase among the labouring classes, who find it a cheap refreshment or luxury to indulge upon.

26. (a) It is difficult to state exactly the proportion, but I believe that almost seven-sixteenths of the labouring population are habitual moderate consumers of ganja, and among other classes the proportion of ganja consumers will not exceed three-thirty-second part of those classes of people.

(b) The number of habitual excessive consumers are only few, and would not go beyond one-sixteenth of the population.

(c) and (d). It is believed that occasional moderate consumers and occasional excessive consumers number themselves very few and do not come under any proportion.

27. From the proportion stated above, it will be seen that the labouring classes and artisans mostly take up to consume ganja.

28. The average allowance per diem ranges generally from one-eighth of a tola to a quarter tola to a moderate consumer, and from half a tola to two tolas for a habitual excessive consumer. I have seen two or three men that smoke half a pawa of ganja per diem. The average cost ranges according to the quantity of ganja they daily consume, though it is said that a moderate consumer can manage with half an anna a day, while an excessive consumer requires four annas per diem.

29. I have heard that some exceptional ganja-smokers mix dhatura with ganja to make it more strong, but the number of such men is very limited. I don't know whether any other massala is mixed with bhang except some spices to make it fragrant. Sometimes patti, as stated in paragraph 14, is used by certain bhang drinkers who find bhang not strong enough to afford them that height of intoxication to which they like to indulge. Some use bhang and patti mixed together.

30. The consumption of each of these drugs is mostly practised in solitude, though often habitual ganja-smokers who are neighbours, come to meet in certain parts of the day to pass their lazy hours in pleasant talks, refreshing and exhilarating themselves on the fumes of ganja. It is the male sex that usually consume it, and except some public women of the bazar no one of the other sex indulges in ganja. The few children that addict to ganja-smoking are considered lost children.

31. The habit of consuming ganja is early formed especially in bad companies, and if once formed it is difficult to break off. And it is often found that habitual consumers turn up excessive consumers.

32. Among Hindus in certain form of worships of their god Mahadeva ganja is used, but it is not much observed now by the gentry. Recently among the low class people, a new ceremonial by the name of Tinlakpeer has come into custom, in which ganja is the chief ingredient. In observing the ceremony, habitual and occasional ganja-smokers, even non-smokers, freely mix, and all indulge in ganja-smoking, and in these so-called religious meets people are taught to taste ganja which is really injurious.

33. The consumption of any of these drugs is considered prejudicial. The religious idea of using them is now-a-days discouraged and disreputed; though certain religious sects, mostly ascetics, regard ganja-smoking as a necessity to lead their religious life and achieve the object of their religion. Among people in this district ganja plants are not worshipped, and I have not even heard of any such custom.

34. Though ganja-smoking is thought to be injurious, still it will be a privation, specially to the labouring class of the population, to forego it altogether. And if ganja is no more allowed to them, they will mostly addict to spirit drinking

which will be practically more prejudicial to their health as well as to their income. Ganja is used in this country from very traditional times, and it is no introduction of Western civilization. To meet their cravings for intoxication it suits more the constitution of the people than any other intoxicating ingredient.

35. The prohibition of ganja in particular might occasion some discontent among certain classes that cannot do without it. But I think certain restriction is more advisable than prohibition. In my opinion no political danger except clamour is probable by such a discontent. The total prohibition of ganja will force the people to addict to alcoholic stimulants or dhatura which are regarded more injurious than ganja.

36. To a certain extent alcoholic stimulants have been substituted for these drugs, as ganja-smoking is considered as an ignoble habit of the low people. People are also prone to the fashion of the time. Among alcoholic drinkers, those that drink European liquors are regarded more dignified than country wine consumers.

37. It is said that charas-smoking in moderate shape is milder than ganja-smoking.

38. I have no experience about the matter entered in this question.

39. I have not experience enough to pass any opinion on the matter in this question.

40. I know that native kabirajes make some sort of aphrodisiac medicine, rather confections, in which ganja is one of the ingredients. Bhang is used sometimes as a digestive medicine. I have never seen ganja to be used for cattle diseases.

41. Moderate use of ganja, as I said before, gives staying power under severe exertion or exposure, or to alleviate fatigue. As for other matters referred in this question, I have no better knowledge.

42. I cannot say that use of ganja in any shape and form is harmless in the long run.

43. Ganja-smokers are invariably considered men of rash and impetuous character.

44. I can only say that moderate use of ganja is refreshing, and produces intoxication and promotes appetite to a certain extent.

45. The matters referred in this question are more in the sphere of medical men than that of mine to answer.

46. I have nothing more to answer than what I have done in paragraph 45. But I can so far say that habitual excessive consumers generally degrade themselves mentally and morally, as well as physically.

47. Though the habit of ganja-smoking is not exactly hereditary, but it gives license to the posterity to addict into the pernicious habit of smoking ganja.

48. I have nothing more to state than what I have said in paragraph 47. The question partly needs medical knowledge to be answered.

49. It is said that ganja, but not bhang, has aphrodisiac properties.

50. It is rather powerfully poisonous when used in excessive quantities.

51. I can say that most of the bad characters are ganja-smokers; and it is ganja that makes them impetuous and bold to perpetrate the foul actions they commit.

52. I believe they grow up more fierce and turbulent by the excessive use of ganja.

53. I believe on the affirmative.
54. I think they do.
55. I have experience of such cases.
56. I have not much knowledge on these matters, as referred in this question.
57. I know that ganja is smoked, and nothing more.
58. I have not much knowledge about the system of present excise administration, and consequently unable to answer this question.
59. I have no answer to make.
60. Ganja is very little produced in our district, so I have nothing to say as asked in this question.
61. Charas is neither produced nor much known in this district.
62. Bhang, as understood by this district people, grows spontaneously in abundance, and I think no method can be adopted that will come to practical effect in the way of control.
63. I am not in a position to answer the ques-

tion which requires medical knowledge to be properly answered.

64. I like that Government should adopt stricter regulations for the import and export of these drugs than the present existing ones.

65. It is difficult for me to answer a question like this.

66. I have no knowledge of the thing and cannot pass any opinion.

67. I have no answer to make.

68. In our district there are ganja shops almost in every town and mufassal market, where generally ganja-smokers resort and smoke ganja; and sometimes innocent people are tempted to use ganja in these shops.

69. The wishes of the people are never consulted or considered in opening a ganja shop in any locality. The excise authorities give license to the applicants to open these shops. The public opinion must necessarily be considered and consulted.

70. I have no knowledge about the matters entered in this question, and no answer to make.

Appendix to the evidence of BABU JAGAT KISHOR ACHARJEA CHAUDHURI.

Letter No. 460-A., dated Calcutta, the 6th March 1894, from T. INGLIS, Esq., Secretary to the Board of Revenue, Lower Provinces, to the Secretary to the Indian Hemp Drugs Commission.

In continuation of the Board's endorsement No. 2274-B., dated the 28th December 1893, I am directed to state, for the information of the Commission, that on receipt of the replies of Babu Jagat Kishor Acharjea Chaudhuri to the

questions framed by the Indian Hemp Drugs Commission, an enquiry was ordered regarding the alleged cultivation of ganja in certain villages in Mymensingh near the river Jamuna. The Collector of Mymensingh reports that the Babu cannot specify the villages in question where ganja is said to be cultivated, and that he is clearly laboring under some misapprehension. A local Sub-Inspector of Excise was deputed to interview the Babu with a view to make the necessary enquiries on the subject, and it appears from the report he has submitted that Babu Jagat Kishor Acharjea Chaudhuri was laboring under a delusion when he sent in his answers to the Commission's questions.

180. Evidence of BABU KAMALESWARI PERSAD, Zamindar, Monghyr.

1. I owe my information to hearsay. I have also heard about these drugs from the persons who consume them.

4. It has no different names as far as I know.

16. Bhang is generally prepared by people in their houses.

17. By cultivator class.

19. Ganja and charas are used only for smoking. I do not know if they are put to any other uses.

20. Ganja is smoked by religious mendicants and low class people, and charas mostly by Muhammadans in almost every locality.

21. Flat ganja is preferred for smoking. All these three kinds are used according to the means of the consumers.

23. No.

24. All classes of people and in almost every locality, but specially in North-Western Provinces, where one-half of the population eat or drink bhang, and a few people only in Bengal.

25. The use of these drugs is on the decrease on account of their being expensive.

29. Dhatura is not used. Bhang massala is mixed with bhang. Its ingredients are black pepper, aniseed, endive (kasni), seeds of cucumber, and sugar.

30. These drugs are generally consumed in company. The consumption is mainly confined to the male sex, and is practised in young age. Children do not consume them.

31. Yes; it is not difficult to break off if it is not habitual. Yes; there is such tendency.

32. There is no social custom, except religious custom, which is prevalent only among religious mendicants in regard to the consumption of bhang and ganja.

33. There seems to be a public opinion in regard to the practice of bhang. The use of charas and bhang produces bad effects. It is therefore that these are held in disrepute. There is no custom of worshipping hemp plant, but sometimes in performing religious works, certain people make offerings of ganja and bhang.

34. That class of consumers who have been using the drugs from a long time, and who have therefore formed a habit, will suffer a serious privation if they forego them.

35. No; if prohibition be enforced, the drugs will be used illicitly. Prohibition will occasion serious discontent among the consumers.

37 and 38. No.

40. Only bhang is used medicinal purposes.

Ganja and bhang are used in the treatment of cattle disease.

41. The moderate use of bhang may be beneficial in its effects.

42. The moderate use of charas and ganja will not do much harm.

43. Yes.

45. No; moderate use will not produce bad effects.

47. No.

49. It is not used by prostitutes. If moderately used, it does not produce impotence. If taken excessively, very injurious results will follow, and may produce noxious effects, physical, mental, and moral.

51. Yes; they use ganja. Its moderate use has no connection with any crime.

53. Yes. I know of no such case.

55. Seldom. Complete stupefaction can only be induced when the drug is mixed with some other thing.

181. *Evidence of BABU KRISHNA CHANDRA RAI, Baidya, Government Pensioner and Zamindar, District Dacca.*

1. I was in the Sub-Executive Service for about 27 years and was in charge of the Abkari Department of Pirojpur Sub-division for about 2 years, of the Mymensingh District for more than a year, and of the Dacca District for about 5 years. Pirojpur is in Backergunge District. I had, when in charge of the Abkari Department, opportunity of obtaining information regarding hemp drugs.

2. The definitions given by Dr. Prain are correct and may be accepted in the districts named by me, *viz.*, Dacca, Mymensingh, and Backergunge, and in others where I have been in the course of my service; the names locally known are also the same, *viz.*, flat, round, and chur ganja.

3. Hemp plant (wild) male generally and mostly, and female in extremely rare cases grow spontaneously in Dacca and Mymensingh Districts. I do not recollect seeing the plant in Backergunge. In the Dacca District it is abundant specially in the sub-division of Manikgunge where my home is. I can reasonably venture to say that it is also abundant in other parts of Dacca and in some parts of Mymensingh, where the land is not very low.

4. It is called bhang or siddhi and it refers exactly to the same plant.

5. I have invariably seen wild hemp grows on lands which are used as homestead land. No special conditions of climate, soil, or rainfall are necessary.

6. Its growth is dense ordinarily.

7. There is no cultivation of the hemp plant in the districts of which I have experience, *viz.*, Dacca, Mymensingh, and Backergunge. I know also that there is no such cultivation in Tippera, Noakhali, and Faridpur. In rare cases one or two female plants spontaneously grow in the premises of the ganja-smokers, but the smokers take care to conceal the fact from the authorities for fear of punishment.

8. No answer necessary.

9. I can give no information on this point.

10. Regular cultivators of hemp plant are only to be found in Rajshahi, of which district I have no experience and can give no information.

11. I have not seen cultivation. I said I have never been in Rajshahi. My evidence will be hearsay. I am told that seeds are raised sometimes from the female wild hemp plant.

12. I have no reason to suppose that the wild hemp is anywhere specially cultivated for producing ganja.

13. The cultivation is restricted to only Raj-

shahi District in Lower Bengal. Can give no information required by this question, as to why it is restricted to only one district and not common to all the districts. I think the cultivation is not impossible, but never tried in any other districts.

14. My answer refers to the districts of Dacca, Mymensingh, and Backergunge. In none of these any preparation is made of the hemp plant for ganja, charas, and bhang, but leaves of the wild hemp are dried and preserved in small quantity by some persons for using medicinally.

15. There is no preparation of any kind in the districts mentioned above. Those who take wild bhang daily are mostly up-country men, who come to East Bengal for service. Hindus of this part of the country who are addicted to bhang drinking pound the dried leaves, mix sometimes with milk and sugar, but often with water, black pepper and dhoma (a sort of spice) powder and then drink. This preparation is made immediately before drinking.

16. I have said above what I know of the wild hemp plant from which ganja is in rare cases prepared by the smokers on whose premises one or two female plants grow spontaneously. The preparation is made secretly and by concealing the fact from the authorities. Charas is never prepared in the districts I named.

18. All three drugs become deteriorated and lose effect when kept for a long time, hence the surplus ganja of the Government store (gola) is destroyed annually. They never or seldom remain useful after two years, and after a year, I am told, the effect or intoxicating power becomes much less and therefore consumers do not use them.

I am not aware of any special measures which can be taken to prevent deterioration.

19. Ganja and charas are used only for smoking. I am aware of no other purpose for which they are used.

20. Ganja-smokers are to be found amongst all classes of the people in these districts; the proportion, I suppose, may not exceed on an average 7 per cent. or even less than that; comparatively a very small number of men can only be traced amongst the urban population who are addicted to the use of charas. Ganja smokers are to be found both in towns as well as in villages. Men who use charas can hardly be found in villages.

21. I am of opinion that people seldom look to the difference in kinds or effect; they look chiefly to the cheapness of the price, and hence flat ganja

is more in use in all parts of the districts I mentioned.

22. I can give no correct answer to this. When at Dacca I had only one or two shops under me, I think charas used to be brought from Calcutta.

23. I have not seen nor heard that bhang is ever used in smoking.

24. Bhang consumers generally belong to the middle class of the population. Low people do not use it as narcotic or for intoxication. It is difficult to give population, which, by guess, I would assume to be not more than 2 per cent.

25. The use of ganja and bhang is on the decrease. Domestic expenses increased to a very great extent, and the people can hardly afford to spend money in luxury and debauchery; besides, education is now more spread and its effect is gradual reformation of society.

26 and 27. I cannot give any correct, or that may be approximately correct, proportion of the different heads.

28. Average daily allowance by guess may be assumed as follows:—

(a) $\frac{1}{4}$ of a quarter tola (*i.e.*, 4 annas worth in weight) cost little above one pice;

(b) $\frac{1}{4}$ of a tola (*i.e.*, 4 annas worth in weight) cost 5 annas.

29. In the districts I mentioned before, no ingredient of any sort is mixed; at least I am not aware of any mixture. Dhatura I learn on enquiry is never used. I know nothing of "bharg massala."

30. Consumption of bhang and ganja is generally practised in solitude, but on some occasions it takes place in company. In rare cases ganja-smokers assemble in the house of one of their members, who may happen to be comparatively a well-to-do man in the village, and there smoke every night at his cost. Females of bad repute smoke in some cases. It is not usual for children to smoke ganja or drink bhang. I am not prepared to say that ganja smoking is confined to any particular time of life. It is more generally used by male than female sex.

Amongst the Hindus of all classes, there is a custom in Lower Bengal to use bhang, almost universally, on the evening of the last day of the Durga Puja, *i.e.*, on the Navami day, when prepared bhang powders mixed with sugar are offered to god and goddess Mahadev and Parvati and then used by all. The powder is used in such small quantity that it never produces any intoxication. Even children of ten or twelve years take little bhang on this occasion.

31. The habit is easily and gradually formed. It is difficult to break it off, and there is tendency to grow a habit for using in excess.

32. I am not aware of any social custom, but low class Hindus who are ganja-smokers sometimes perform a ceremony which they call "union of three gods," in which songs in praise of the gods are sung, and smoking ganja in new pipes takes place. On these occasions smoking in excess takes place very often. The religious custom or practice of using bhang I have noticed in my answer to question No. 30.

33. The consumption of both the drugs, bhang and ganja, is regarded unfavourably, socially and religiously. The public opinion is against any use of the drugs religiously. General reformation

of social and religious custom and the spread of education are the causes of these sentiments. Hemp plant is not worshipped by any class of people in East Bengal.

34. It would be a serious privation to those who are addicted to the drugs if they were forced to forego the consumption. The reason is obvious. Opium-eaters cannot do without opium and there are habitual ganja-smokers and bhang-drinkers who cannot do without them. It is not easily possible to give any probable number of each class.

35. Prohibition will not easily be possible or feasible; if measures be adopted, illicit consumption would be carried on. Government may make laws against the use and growth of the drugs and enforce penalty for illicit consumption, but society would gain little. Government would gain little; the Police or whoever will have to carry out the operation of the law will be enriched. The discontent amongst consumers will be serious, but I do not think that there will be any political danger. I would suggest that Government make certain rules or laws appointing honest and sober villagers to form a committee or panchayat. They ought to be vested with powers to inflict social punishment, such as excommunication, etc.; they will have to look to the education of the mass, and by gradual introduction of practical reformation and by superior power of persuasion they may do something in the way of reducing consumption, and by slow progress may look to the final object. It will take long time to get even a slight reformation in this direction. The prohibition may at first induce the consumers to use dhatura or any other drug. Alcoholic stimulants will be too dear for them.

36. I am not of opinion that alcohol is now more used as a substitute for any of these drugs. On the other hand, drinking is now looked upon as more expensive and is not harmless.

37. Cannot answer this question.

38. I consulted many consumers who are ordinarily my villagers; they one and all deny feeling any perceptible difference in effects.

39. Ganja is used in the three districts I named, only by smoking. No other form of using this drug prevails in this part of the country. Bhang is used generally in liquid form and occasionally in powder form. It is never smoked. I cannot therefore say if smoking of any of the two drugs is less injurious or otherwise. My remarks do not refer to charas.

40. The use of bhang is sometimes prescribed by native doctors (Hindu kabirajes) in cases of chronic looseness and in other bowel complaints. Bhang leaves dried are used in fomentation in cases of rheumatism. Ganja is used in medicine for paralysis. Those whom I consulted cannot say if these drugs are used in the treatment of cattle disease.

41. My remarks apply only to ganja and bhang and not to charas. There is a division in the opinion of the smokers. Some say that a moderate use of ganja is digestive, whilst others deny this. It is relieving (and this fact is admitted by many) after severe exertion or exposure. It does not serve as a febrifuge or preventive of diseases in malarious tracts. Its use is admitted, even by the smokers themselves sometimes, as bad in effect.

Moderate use in bhang is admitted by many as beneficial in all cases of (a), (b), (c), and (d).

There is no special class of people to whom the above remarks apply, except those who are known amongst the Hindus as "religious mendicants"; they use exclusively bhang. My remarks apply to both moderate habitual use as well as to moderate occasional use of the drug.

42. I have mentioned above that moderate use of bhang is beneficial. Moderate use of ganja may not be beneficial, but it is harmless, because it is not very expensive, nor the smokers are in any way troublesome to the neighbours.

43. Yes, they are inoffensive.

44. Immediate effect is refreshing; the consumers also feel little intoxication. They say that it does not allay hunger, but it creates appetite. The effect lasts only a short time. No after-effects. The want of subsequent gratification produces no uneasiness.

45. I think this is intended for medical men.

46. The general opinion amongst the sober and educated men is that excessive smoking of ganja has a tendency to insanity. It is productive of dysentery. It impairs the moral sense and leads to laziness and to debauchery.

47. and 48. I am not of opinion that the habitual moderate or excessive use of these drugs, *viz.*, bhang and ganja, would appear to be a hereditary habit, or to affect in any way the children of the moderate consumer.

49. The moderate use of both ganja and bhang is practised as an aphrodisiac. It is so used by prostitutes. The use is said to be less injurious than its use as an ordinary narcotic. No one whom I asked says that the use of hemp produces impotence, but they are not medical men.

50. The same remarks apply to excessive use. After such use for some years the ganja consumer naturally becomes weak, peevish, and is apt to get dysentery.

51. It is supposed by many that bad characters are generally consumers of ganja, and in few cases they are addicted to other narcotic. They use ganja to refresh themselves before they attempt to commit any crime. This opinion is general or common amongst the natives.

52. The same as above.

53. I found no case to suppose that excessive indulgence in using ganja or bhang incites to any unpremeditated crime, violent or otherwise. I know no case in which it has led to temporary homicidal frenzy.

54. They do so, but not in all cases.

55. I am aware that criminals do sometimes try to stupefy their victims, but I cannot say whether they do this by means of these drugs. The impression prevails that they use dhatura for this purpose. Latter part I cannot answer.

56. I have no information to answer this question. I can only say that dhatura is seldom or

never used in this country (East Bengal) as an admixture.

57. No reply can be given.

58. Excise administration in respect to hemp drugs, as far as I can judge, is working well, though it is capable of improvement.

59. I would suggest a reduction in the number of shops for selling the drugs and increase of duty. This will, I am of opinion, reduce consumption without causing loss of Government revenue.

60. Dacca, Mymensingh, and Backergunge are not ganja-producing districts. I can give no information.

61. No reply can be given.

62. Wild bhang grows spontaneously in abundance in the district of Dacca, and partly in Mymensingh, but not in Backergunge, where the growth is scarce. The consumers of bhang in these districts are few, and they use it to some extent medicinally. There is no cultivation, and any control on the part of the authorities quite unnecessary. Orders for destruction of the wild plants may continue as at present.

63. I left service for about ten years, and during this period took no notice of the present system; but generally I have no objection to the wholesale and retail vend of ganja and bhang or their preparation. I can say nothing of charas.

64. There is, in my opinion, no objection to the existing regulations.

65. In my opinion the taxation is reasonable. I would suggest a still heavier tax for the drugs, as well as for alcoholic intoxicants, with a view to reduce consumption.

66. There is some slight difference in the qualities of the three different sorts of ganja. The tax for flat ought to be very slightly less than for round and chur ganja, but the effect or intoxicating power of all three kinds is comparatively very little, at least such is expressed by the ordinary consumers.

67. I do not consider that there is any objection to the present method. The administration is going on smoothly for some time past.

68. I am aware of no houses or shops in the three districts I named, licensed for the sale of the drugs or their preparations, where, at the same time, they may be consumed on the premises. Had the case been such, it would have been objectionable. It would be giving undue advantages to the vendors.

69. When I was in the service, it was usual to consult and take the opinion of the neighbouring people before a site for a shop was settled, but no opinion was ever asked before a shop was to be opened. I think local public opinion ought to be asked or consulted.

70. I have no information to answer this question.

182. Evidence of BABU BEPIN BEHARI BOSE, *Kayasth, Zamindar, Sridhanpur in Jessore.*

1. I have the opportunity of seeing only bhang plants spontaneously growing in many parts of Jessore.

2. As regards the same Dr. Prain's report is correct. Ganja and charas are not grown anywhere in the district.

Bhang, charas and ganja.

3. Jessore and Backergunge are the places in which bhang grows in abundance spontaneously. Ganja grows in Rajsbahi I have heard, but not spontaneously; they are cultivated.

4. Bhang and ganja. They are different plants.

5. They grow in abundance in low lands, just after the rains set in.

6. Very dense.

7. No cultivation in Jessore, but there are, so I have heard, in Rajshahi.

8. There being no cultivation in Jessore, I am unable to reply to this question.

14. Bhang leaves are dried and kept by some people for use, but not for sale.

15. Dried bhang leaves are dried and ground with water and then drunk by some people; these leaves are taken from wild plant.

16. Bhang is prepared by the people in their houses. I have no experience of the same as regards ganja and charas.

17. In Jessore and Backergunge bhang leaves are prepared by people of all classes who use them.

18. They deteriorate if kept on earth without covering them tightly.

19. As far as I know, they are used only for smoking.

20. The former is much used in smoking by the lower class of people and the latter by the middle class. I don't know the proportion of the people who use them. In towns more people use them than mufassal.

21. I do not know.

22. Charas is not native of Jessore; it is imported from Behar and perhaps Rajshahi in Bengal.

23. Bhang is not used for smoking.

24. Bhang is used in drinking by middle classes in North-Western Provinces, Behar, and Bengal. About two-thirds of the people in the two former and about one-eighth of the people in Bengal.

25. Except in towns I don't think the use of the drugs is on the increase, at least in Bengal.

26. (a) About one-eighth of the people in Bengal are habitual consumers of bhang; save this I do not know.

(b), (c) and (d) I do not know.

27. Bhang is first used for medicinal purposes and then it is habituated. I have no experience as regards ganja and charas; so far I know that many people have ruined their health by the use of ganja and many contract dysentery and consumption and succumb to them.

31. The habit is formed easily. It is not at all difficult to break off the habit. Yes, the habit generally grows excessive.

32. It is the custom amongst sanyasis and mendicants to use ganja; and the bhang leaves are required to offer to Siva to make offering to the deity, but not essential. It is generally excessive, and the habit proves injurious.

33. The use of these drugs is now generally regarded with hatred; the public opinion, with few exceptions, is quite against it. Of these drugs ganja is generally in disrepute. I do not know anywhere hemp plants are worshipped.

34. There may be some uneasiness at the time people forego the consumption, but after some time no such uneasiness will be felt. As is evident with the convicts in the jails, they are not allowed to continue the habit and they enjoy better health. I have no idea of the numbers of each class.

35. Yes, it will be feasible to prohibit the use of ganja and charas, but not bhang, as it is less

injurious, and religion of the Hindus in a certain measure enjoins the use of it. If the use of the former two drugs be prohibited by law, I dare say no one will illicitly use them. No serious discontent will be occasioned by the prohibition, and no political danger will ensue. The prohibition will not be followed by recourse to alcoholic stimulation or other drugs.

36. No. The people will easily forego the use of drugs if prohibited by law.

37. So far I know that the effect of charas smoking is not so serious as that of ganja.

38. I do not know.

39. As regards bhang only, my experience is that it is less injurious in drinking than smoking. I have no knowledge of the other two drugs, ganja and charas.

40. No drug is ever prescribed by the native doctors for medicinal purposes, except in rare instances the kabirajes do so in diarrhoea and dysentery to drink bhang only.

41. (a) Bhang to a certain extent for increasing digestion.

(b) Bhang to a certain extent for increasing digestion.

(c) No.

(d) No.

The middle class (bhadralok) use bhang for promoting digestion. They use in moderation generally.

42. I do not believe harmless at all.

43. Moderate consumers of bhang are inoffensive, but not so the ganja and charas consumers.

44. I do not know.

45. (a) Yes.

(b) Yes.

(c) By the long use it impairs digestion.

(d) Ganja creates the diseases alluded to.

(e) Ganja does so.

(f) Ganja does so.

The insanity it produces is of a permanent character, and in some cases temporary; in the latter case people become free from it when they are restrained to use it. Many discontinue at once the use of ganja after liberation from restraint, such as prisoners when liberated from jails. People do not get relief from mental anxiety or brain disease by the use of hemp, rather the diseases are aggravated by it.

46. I cannot do so, as I am not a keen observer.

47. I know in some cases the habit is hereditary. I do not know whether it affects the children of the moderate consumers, but it does to that of the excessive ones.

48. I cannot do it, owing to my imperfect knowledge on the matter.

49. The prostitutes use them as aphrodisiac. I do not know which is more injurious. Except bhang and charas, ganja produces impotence.

50. I cannot do so owing to my imperfect knowledge on the matter.

51. Many bad characters are so. As regards connection with crime, I do not know.

52. I cannot do so.

53. I think so, but I do not know any case.

54, 55 and 56. I do not know.

57. I have no experience in the matter.
 58. I am not acquainted well with the present system.
 59, 60 and 61. I am not in a position to do so.
 62. It should be controlled by the imposition of a heavy duty; it is by all means feasible.
 63 and 64. I am not in a position to answer.
 65. Bhang and alcohol should be more heavily taxed, and ganja and charas should be strictly prohibited by law.
 66. I am not in a position to reply.

67. I have not the least objection to increase taxation on these drugs, rather I hope Government should not shrink from its duty to check and heavily tax them.

68. There are many shops and houses in the province; they should be stopped and controlled. They are creating the greatest injury to the country, specially in a tropical one in which we inhabit.

69. Local opinion should invariably be taken. I do not think it is done so in all cases.

70. I do not know.

183. *Evidence of M. KAZI RAYAZ-UD-DIN MAHAMED, Zamindar, Commilla, Tippera.*

1. I was a Sub-Registrar at Moradnagar for a period of about 20 years. Lately I have inherited the zamindari of my father. I had very little opportunity of studying hemp drugs.

2. I can't say whether the definitions are appropriate, as I have no idea. They are locally known as charas, chepta ganja, and gol ganja.

3. In the Tippera district bhang grows spontaneously. It grows everywhere on moist land; but I do not know whether ganja grows in the district.

4. They are known as bhang or siddhi plants and ganja plants. They are separate plants.

5. It grows in a moist climate. A soft soil, but not under water. The rainfall should not be excessive, and no water should accumulate at the root of the plant. Elevation has no effect on the growth of the plant, for it grows on low as well as high lands. I have collected this much from the public.

6. I can't say whether the growth is scattered or dense; as far as I learn from people one or two growing somewhere.

7. (a) None in Tippera District.

(c) No; it grows wild.

The bhang plants grow wild everywhere scattered.

8. No cultivation.

9. None.

10. No; none.

11. No.

12. None cultivated here. The practice is very limited. I do not know whether the male plant is extirpated.

14. None here. Bhang is produced, but just sufficient for the consumption of the people for medicinal purposes. It is produced everywhere.

15. No ganja and no charas is prepared here. Bhang is prepared from the wild hemp. The leaves are simply plucked and dried in the sun. These are stored up and used for smoking, eating and drinking with sugar, gur, and milk; also used for medicinal purposes.

16. Prepared by the people in their own houses. No

17. By everywhere using hemp.

18. Bhang deteriorates by long keeping. It may keep good for six months. Ganja deteriorates by long keeping, say, for a year. Bhang and ganja quite lose their effects in time; but ganja will take much longer time. Exposure to damp and

air is the cause of deterioration. Deterioration may be prevented by keeping these in air-tight boxes as I come to know.

19. Ganja is for smoking, as well as it is used for medicinal purposes, in curing paralytic and rheumatic pains, as I have experienced personally. It is also pounded and used in mixing with sweetmeats. This is so used in Dacca and Tippera districts.

20. The lower classes of Hindus and Moslems who undergo hard labour with a view to take rest are smoking ganja, and very little by the middle classes and trading classes. I think the ganja-smokers may be 3 or 4 per cent. in all localities.

21. Flat ganja is preferred as well as round ganja. Flat, round, and chur ganja are used, but chur ganja in very small quantities.

22. I do not know.

23. Bhang is sometimes used for smoking when ganja cannot be obtained by the consumers. In all localities. By all habitual smokers to a very small extent.

24. The up-country men are generally in the habit of eating or drinking bhang. About 20 per cent. so use it. This is to be found in all places. Natives drink bhang. About 5 per cent. so use it. All classes of the people use bhang for medicinal purpose. In all localities.

25. The up-country men coming to our country have extended the use of ganja as well as bhang to a greater extent than before.

26. Ganja consumers are—

For bhang—	
(a) 75 per cent.	(a) 75 per cent.
(b) 15 per cent.	(b) Nil.
(c) 8 per cent.	(c) 13 per cent.
(d) 8 per cent.	(d) 3 per cent.

27. The ganja consumers are the working and labouring classes of Moslems and Hindus. The occasional consumers of ganja are the Sahas, Pals and low class Moslems. The Hindus smoke on social festivities such as Trinath mela, marriages, and pujas. The habitual consumers are those who take hard bodily labour and pursue detestable and noxious callings, such as Chamars and Mehters, among Hindus.

The habitual consumers of bhang are the up-country men, and very few of the natives. The occasional consumers are up-country men and natives also.

For ganja—		For bhang—	
(a) 2 pice		(a) $\frac{1}{4}$ of a pice.	
(b) 2 annas		(b) 1 pice.	

Bhang is ordinarily taken with cardamom, black pepper, sugar, and milk, kakri and khira and pumpkin seeds.

29. Dhatura leaves are mixed with ganja to increase the narcotic effects. Ganja is ordinarily mixed with tobacco. Dhatura seed is exceptionally mixed with ganja by habitual excessive consumers to increase the narcotic effects.

30. Ganja is consumed 25 per cent. in solitude and 75 per cent. in company of at least of two persons. Bhang is consumed in solitude. It is mostly confined to the male sex. People of middle age consume ganja. Habitual consumers also smoke ganja when old. Low class women, bairagi among Hindus, also consume ganja. Bhang is also taken by old women of Hindu sect, bairagi. Children never use any of these drugs.

31. The habit is easily formed. It is difficult to break off the habit. The moderate habit of using the ganja develops into the excessive. The habit of consuming bhang is not easily formed. It is easy to break off the habit. Its moderate use does not develop into the excessive.

32. Ganja is consumed in Trinath mela. Number of people of Hindu sect meet and sing religious songs. Ganja is then offered to the god Trinath, and everyone present is bound to smoke ganja on pain of the god's displeasure. Ganja is consumed by sanyasis and fakirs to aid the concentration of their minds. The use is generally excessive, and the use of bhang is temperate.

33. Ganja-smokers are generally regarded with disrepute. The public opinion as regards ganja smokers is that they associate with low people, and have no control over their passions and are excitable. Bengalis generally do not approve the use of any form of narcotic. The character of the people is mild, and the climate does not require stimulants. Bhang consumers are not regarded with disrepute. There is no custom of worshipping the hemp plant; but ganja is often given as offering to Mahadeo by the habitual excessive consumers of the Hindu sects, such as sanyasis.

34. Yes; it would be a serious privation to forego the use of ganja. People can forego their food rather than the use of these drugs. Three per cent. of the people are ganja smokers; but it would not be serious thing to forego the use of bhang. Two per cent. use bhang here.

35. It would not be feasible to prohibit the use of ganja or bhang. They would be consumed illicitly. It will be difficult to enforce the prohibition. The prohibition would occasion serious discontent among the consumers; but it would not amount to a political danger. The prohibition will be followed by recourse to alcoholic stimulants by ganja smokers.

36. No; it is quite contrary.

37. I do not know.

38. I have no knowledge of it.

39. No; all alike injurious. I can't say whether drinking or eating ganja is more injurious. Bhang is seldom smoked.

40. Bhang is used for medicinal purposes by kabiraj. It is also used in the treatment of cattle disease. Ganja is also used for medicinal purposes, to cure rheumatic and paralytic pains, which I have personally experienced.

41. (a) Bhang is used as a digestive.

(b) Ganja is used under severe exertion and to alleviate fatigue, and as a staying power under severe exertion.

(c) Ganja is used as a preventive of disease in malarious tracts.

Low class people use ganja. Middle and high classes, especially up-country men, use bhang. The moderate habitual use is referred to.

42. The moderate use of bhang is harmless, because it fattens the body and increases the strength, whereas this is not the case with ganja rather it spoils blood and reduces men to skeletons.

43. Yes; they are.

44. The moderate use of bhang is refreshing in its effects. That of ganja produces intoxication, but not for habitual consumers. Bhang creates appetite, and the effect lasts for an hour or so.

45. It does not impair the constitution, unless milk is taken afterwards. It does injure the digestion, but bhang does not. The use of ganja or bhang does not impair the moral sense or induce habits of immorality or debauchery. The use of ganja causes bronchitis and asthma. The excessive use of ganja induces laziness; it deadens the intellect and makes men excitable, and sometimes produces insanity, temporary and permanent. The patients are easily irritable and the insane confesses the use of ganja.

46. Ditto.

47 and 48. No; it is not hereditary. It does not affect children.

49. Ganja is not used as an aphrodisiac. The moderate use of ganja or siddhi does not produce impotence.

50. Ditto. The use of excessive ganja produces impotence.

51. About 50 per cent. of the bad characters are habitual consumers of ganja. No connection with crime.

52. The excessive use makes men irritable, and induces them to commit offences against persons.

53. Excessive use of ganja makes men irritable, and may lead to violent crime. No case has come to my notice.

54. No, not here; but it is used in big towns, where there are hardened criminals.

55. Not here. Complete stupefaction cannot be induced without admixture with dhatura.

56. No admixtures are made here. Ganja is prepared with rose water to make it mild. No dhatura is used here.

57. It is sometimes eaten with bhang and sometimes with sweetmeats. Its effects are very intoxicating. These are used by habitual excessive consumers.

58. It is capable of improving the excise administration.

59. The consumption may be decreased if the duty on ganja is raised and the license fee lowered. This will increase the finance. No duty is levied on bhang. Some sort of duty ought to be levied on bhang.

60 and 61. None produced here.

62. I think the cultivation of the hemp plant for bhang ought to be controlled.

It will be feasible, though not all at once. Licenses on payment of fees may be granted for the cultivation of bhang plant within certain areas. Persons on whose lands bhang plants yielding four chittacks of bhang will be found may be prosecuted.

This will bring the system gradually within the scope of the detective sub-inspectors of excise. Bhang plants will then have to be destroyed by excise officers.

To levy duty on bhang will be the next step. The goladars of ganja receive a good profit. Twenty-five per cent. of the same ought to be paid as license fee.

63. For bhang, see Question 62.

For retail vend of ganja, see Question 59.

For retail sale of bhang, see Question 62.

64. None.

65. Taxation of ganja is reasonable; but no duty on bhang is levied—*vide* Question 62. There is no duty on liquor here.

66. There should be different rates of taxation on different kinds of ganja. As at present, flat ganja has twigs, while chur ganja has not, and it will not be expedient to levy the same rate for both.

67. Objections about ganja and bhang mentioned as before.

68. There are no houses where they may be consumed on the premises, nor would any be suitable, for most of the drug is consumed at the houses of the consumers. Very little is consumed in the shops.

69. Yes; they are considered, and the requirements of a locality are considered. The influential men of the locality ought to be consulted, and the public opinion of the locality must be regarded.

70. Very little ganja, say a few seers, are grown in the district, as I hear from persons. This ganja is very inferior in quality.

184. Evidence of SYAD ABDUL JABBAR, Zamindar, Commilla, Tippera.

1. There are some tenants of mine and servants who use ganja. A few gentlemen too, whom I am acquainted with, use ganja and bhang; hence my knowledge about them.

2. Yes, these definitions apply in our province. In this locality ganja is known by its own name of ganja. Bhang or siddhi is the name generally in use. Charas is also known by its own name.

7. No.

14. No.

19. Ganja is also used in eating. Generally, people smoke ganja, but scarcely they eat it too.

20. A large number of lower uneducated people use ganja. An enormous number of the low class Hindus consume ganja in pretence of their religious worship. The proportion is small of the consumers of ganja and bhang. But throughout the whole province a very large number of the lower illiterate people use ganja and bhang. The number of ganja consumers is larger than that of the bhang. There is no special locality known to me, but the people of the whole province—a great proportion of them—use ganja and bhang.

23. Bhang is sometimes also used for smoking.

25. The use of these narcotic articles is now on the decrease. The reasons, as far as I understand, are as follows:—

- (1) The principal and most prominent reason is the wide spread of education, which is opening the eyes of the people and giving them power of judgment.
- (2) The establishment of associations (national) in different parts of the country, which discuss the evils of these drugs and infuse a hatred towards them in the minds of the young population, the future expectation of the country.
- (3) The publication and circulation of several treatises and pamphlets about the ill-effects of these poisonous elements.

(4) The spread of civilisation.

27. Persons of licentious character and of dissolute nature generally use ganja and bhang. The labourers of the lower class and menial servants give themselves up to the habit of ganja, charas, and bhang using.

30. People use ganja and bhang generally in company. They feel greater pleasure and enjoyment in consuming them in company. Sometimes people use them in solitude too.

Without any distinction to sex, male and female use ganja or bhang. But the number of male consumers is greater than the females. Women of unchaste character use these drugs. Good housewives generally do not use them.

31. (a) The habit of consuming these drugs is easily formed. When one uses these drugs for a few days, he is addicted to it by and bye, and in no long time he becomes slave to these drugs.

(b) Though difficult, it seems to break off these habits when once formed; only a moderate strength of mind and firmness of determination is required to give them up. When one strongly determines to give the habit up, he can do it without much difficulty.

(c) Bhang and ganja, if used moderately, tend to develop to become excessive. A man, when he uses these drugs, though moderately, loses his self-control, and consequently cannot strictly stick to moderation. By and bye, a moderate consumer becomes an excessive consumer.

32. The Hindus of this quarter have many religious customs to observe with ganja and bhang. In Dula puja Deswalis religiously use bhang. In the Hari-Sankirtan and other like festivities Hindus use ganja in large quantities. In a worship, namely *Trinathar seva*, a feast of the Trinath, or god Siva, which is done on Saturdays and other appointed days of the year, they prepare a huge ganja smoke for the Trinath or god. They pass the whole night in a large company in merriment and revelry, smoking the ganja at intervals prepared for Trinath, and thus give themselves up in an excessive smoking of ganja.

33. The consumption of each of these drugs is generally regarded as bad. Whoever consumes

any of these drugs is unanimously considered as immoral. Even those who are habitually addicted to the use of these drugs regard it to be ill, and will never allow their children to get into these habits.

The public opinion is strongly against the use of these drugs. Musalmans are strictly prohibited from using these drugs by religion. It is condemned also in society of the Musalmans. There is a Bengali proverb against the use of ganja current in Bengal. "Whoever uses ganja, his fingers grow, his shoulder gets round, he loses the name and prestige of his forefathers, and himself becomes a thief."

The use of all these narcotics is generally in disrepute amongst people, and specially amongst people who are educated and enlightened. This sentiment greatly owes its origin to the spread of education and the advancement of civilisation.

34. No, the privation in foregoing the use of these drugs is only fanciful and temporary. If any one really tries to abandon this habit, he can easily do it, with a little firmness and strength of mind. Though at first it may appear to be difficult to give up the habit, but if once given up and continued for a few days with strictness, this new habit will gradually be practised and formed by course of nature.

35. It is quite practicable to prohibit the use of these drugs. If prohibited at once, they may be used illicitly; but this illicit use may be lawfully abolished.

If the Government decreases year by year the amount of these drugs permitted to be sold, then in a few years the whole country may be free from these poisonous drugs, which injure people physically, morally, and in respect of money.

If at once the use of these drugs is prohibited, then the consumers may be discontented, but the discontent cannot amount to any political danger, because the consumers are mostly poor, mean, and paltry fellows. If the prohibition is done slowly, as already mentioned, then most of them will not even be able to perceive the abolition.

36. Yes, now-a-days alcohol is substituted to a great extent by low class labourers instead of ganja. The cause I attribute to the open trade of alcohol and its stimulant power when drunk. Labourers feel refreshed after hard toil, when drunk a little. The rich also mostly use alcohol instead of ganja. The reason is as above. The free trade of alcohol and its being had everywhere is the cause of substitution.

41. (a), (b), (c), (d) No.

The ordinary labourers, such as coolies, use the drugs for giving staying-power in severe toil or to alleviate fatigue. The moderate habitual use is what is referred to here.

42. No, I do not think them to be harmless. For the use of the drugs demoralizes the character of people. The more injurious I consider these drugs to use, as people cannot be moderate in it. Though few people may be moderate for a short time, their moderation by and bye reaches excess. A man, who by using the drugs, loses his self-independence and self-control, cannot stick to moderation.

44. The habitual moderate consumers consider it refreshing when they consume their habitually consumed drugs. Yes, it has an intoxicating effect upon even the moderate habitual consumers. It diminishes hunger. It does not create appetite. The effect does not last for a long time.

45. (a) The habitual moderate use of these drugs increases lust. Physically it stimulates the nerves for a short time. It produces a bad mental and moral effect upon the consumers.

(c) It helps digestion of the habitual moderate consumers.

(d) Yes.

(e) Yes.

(f) Yes, it deadens the intellect.

46. The habitual excessive consumers of these drugs, especially of ganja, lose all heart, morality and intellect. There is nothing bad in this world which such a man can't venture to do.

47. No, there are children of the moderate consumers of ganja known to me who have not inherited that habit. But the children of these people generally become of immoral character and of weak health.

48. The children of such people become generally immoral and of delicate health.

49. Yes, the prostitutes use the drugs, especially ganja, as an aphrodisiac. The use of the drug for that purpose is more injurious than the ordinary use as an ordinary narcotic: for when the drugs are consumed as stimulants of lust, people indulge in lust more by its assistance, and hence the injury is more.

50. There are examples of people becoming impotent by the use, especially the excessive use of these drugs.

51. Yes, a large proportion of the licentious people of the lower class use ganja and bhang.

The moderate habitual use has no connection with crime in general, but it is nearly connected with lust.

52. The excessive use of these drugs makes men immoral. It leads—rather compels—men to do all sorts of crimes, *e.g.*, theft, debauchery, etc., etc.

53. Yes, it leads to unpremeditated crime too.

54. Yes, people before committing a premeditated act of violence are often seen to consume ganja.

55. Yes, licentious people generally induce their victims to smoke ganja in order to further their designs. Many such examples are known to me.

57. Ganja is used in eating also.

68. Yes, in many licensed ganja shops, people generally consume ganja. But the shops are not licensed for consumption, therefore it would be better to strictly prohibit the consumption of these drugs in the licensed shops.

69. No, the people are not, to speak the truth, at all consulted before opening a shop. Local opinion ought to be taken into much consideration. The local opinion ought to be the basis of the foundation of these shops.

185. *Evidence of* BABU JOGENDRA KISHORE RAI CHAUDHURI, *Zamindar, Ramgopalpur, District Mymensingh.*

3. In certain quarters of Mymensingh bhang plant grows spontaneously. I cannot call this abundant.

7. No.

14 and 16. From what I know and understand, hemp plant is different from bhang plant. The latter grows, as already said, spontaneously, and native physicians and those who consume bhang gather the leaves and dry and preserve them for use.

20 and 24. The lower class of people smoke ganja. I have no idea of the proportion. Charas is of rare use in this district. Many up-country men habitually use bhang. Respectable Bengalis used to take bhang almost invariably in the Dassara and Sripanchami days, but the practice is fast dying out.

Sadhus and sanyasis, *i.e.*, religious mendicants of the lower order, are often seen to smoke ganja with the object of effective meditation and concentration of the mind.

25. The use of these drugs, I shall say, is on the decrease. This may be owing to the influence of Western civilisation, which has a tendency to popularise wine.

26. I cannot say anything as to proportion. The up-country men that are to be found in this district are moderate consumers of bhang. There are occasional moderate consumers, too, among them, and, as already told, among the Bengali respectable class. Excessive consumption of any of these drugs is exceptional.

27. Bhang taken on the puja days (Dassara, etc.) is for pleasure; all besides for medicinal purposes as a tonic. This drug helps digestion and increases appetite.

As for ganja, I think it may be safely asserted that it is mainly used for the purpose of undergoing hard labour, toil, and fatigue.

28. Habitual moderate consumption of bhang costs nothing; but such consumption of ganja may cost half an anna per diem or thereabout.

29. To increase intoxicating power sweets, including milk, are mixed with bhang; ganja is mixed with tobacco leaves.

30. To smoke ganja is degrading to a respectable man, and hence to him solitude is convenient. Ganja, as a rule, is not known to be used in company, except in low brothels. Children, as a rule, do not use any intoxicating drug. Those of the low class people, however, are often seen to smoke tobacco.

31. I know of no such habit being easily formed. Of course, when one has got into the habit, it is difficult to break it off, as is the case with every habit. In ganja smoking there is a tendency, I think, to develop, but not to the extent there is in wine drinking.

32. I know of no custom except what has already been said with reference to Sripanchami and Dassara.

33. Except tobacco, smoking all other intoxicating things is disreputable amongst all classes of natives.

34. I think it will be a serious privation to the cultivators and labourers, because, I understand ganja smoking stimulates to work and

makes one impervious to heat and cold, and it is beyond their means to have a substitute.

35. I do not think it would be feasible to prohibit the use of any. Probably the prohibited drug would be consumed illicitly. It will be difficult to enforce prohibition, and any attempt to do so is almost sure to occasion discontent not only among the consumers, but probably among others also. Such discontent may or may not amount to a political danger; but it cannot be denied that every such discontent has a tendency to develop and amount to a danger. The prohibition is likely to be followed by illicit consumption. In some cases it might be followed by alcoholic stimulants.

36. Yes; the cause is apparently Western civilisation. Large numbers of grog shops is the proof.

40. Bhang is used in several medicines of the Hindu Pharmacopœia.

41. Yes; as above written.

42. I think moderate occasional use of these drugs is harmless. I cannot tell whether habitual consumption is so. Probably it is not, for all sorts of intoxication affect the vital organs, brain and liver, and have thus a tendency to impair general health, and, when the habit is confirmed, to produce dulness of intellect at the same time.

43. Yes.

44. It is refreshing and exhilarating. It does not intoxicate, properly so called, habitual moderate consumers. It is doubtful whether it allays hunger. It suppresses rather the sensation of hunger. Occasional moderate use, I think, does create appetite. I can tell the effect of bhang is perhaps more lasting than those of the other two. Ganja is properly and jocosely called turitananda, which is a very significant expression, meaning instantaneous bliss. The expression is rather vulgar, and has its origin in the fact that the exhilaration caused by it is produced instantaneously. As to after-effect, my idea is, they are not of much consequence, and are not productive of any particular longing or uneasiness.

45 and 46. I would answer all these questions in the negative. I am of opinion that moderate habitual consumption of anything that intoxicates is on the whole more useful than otherwise. Abuse is of course a different thing. It is difficult to draw a line between habitual moderate use and abuse. This must depend upon the good sense of the person using it. When carried to excess everything is injurious. Everything in nature has its use and abuse. I cannot see why, if it is not useful as I say, intoxication in some shape or other should prevail in all classes and in all nations throughout the globe, so far as I know. Habitual moderate consumption of any intoxicating matter is useful only so far as it is confined to its own natural sphere. By this I mean to say that climate, age, and occupation have much to do with reference to any particular class of intoxication. Ganja, for instance, so far as I understand, is not suited to the climate of England or to one of sedentary habit.

I cannot connect insanity with moderate consumption of hemp. There are constitutions, however, which cannot stand the moderate use even. In such cases persistent and habitual use of hemp

or any other such drug may cause serious injuries of different types, according to constitution and predisposing causes. It is not possible for medical men even to say with what effect a particular drug will act upon a particular constitution. I cannot believe that permanent insanity can result, as a rule, from the use of hemp, however, excessive it may be. So far as I understand, its habitual excessive use leads to dysentery, bronchitis, asthma, or consumption even, rather than to insanity.

47. I don't think.

48. When one has already been attacked with any of the above-named maladies, his children may be affected by it. I don't think the habit in any case proves to be hereditary.

49 and 50. Yes; prostitutes in their earlier life may be supposed to have recourse to intoxication more for pleasure and jest than as an aphrodisiac, in the sense in which I understand its meaning. My idea is generally males are initiated in intoxication, at least in this country, for aphrodisiac purposes. This may not be the case with the low class people, in whom necessity may be supposed often to preponderate. I think these drugs, when used excessively for aphrodisiac purposes, do more harm by their tendency to produce impotence. I may add a class of religious mendicants, in Bengal at least. I mean the bairagis and baishnavas, the bouls and the kartabhajas, and such other sects are known to be habitually addicted to ganja smoking, probably for aphrodisiac purpose only.

Love-making and sexual enterprise seem to me to be a part of the religious faith of these people. The tantriks and bhairabs and bhairabis belong to a different order, I think, and these are more addicted to wine than ganja or other drugs. There are some mysteries in all these religious sects and in their habit and mode of life, and ganja or wine, as the case may be, and their use, I think, is looked upon with some religious veneration. Any prohibition, therefore, may be construed to mean the violation of the principle of religious neutrality. And, as already said, the common order of sadhus and sanyasis being mostly addicted to ganja, who smoke it for purposes of spiritual advancement, may also resent any prohibition.

51 and 52. Very likely. Moderate use of any of these drugs has no connection, I think, with any crime. Nor, I think, excessive use even has any necessary connection with crime in general or with crime of any special character. I cannot induce myself to believe that ganja or any other drug is more connected with any crime than alcoholic stimulant. All intoxicating things have their excesses leading to fits of temporary insanity. It cannot be denied that, under such states, crimes are committed; but these are, I should say, rather exceptional cases. In many cases of heinous crimes, such as murder, rape, etc., fits of insanity are often seen to be raised as a plea in defence, and in cases of such plea the aid of ganja smoking is almost invariably invoked in, and medical evidence also is often found to have a leaning towards it. But I have grave doubts as to the truth of these as one of general exception. It is, however, an admitted fact that ganja smoking is becoming associated with insanity and murder and such other crimes and there seems to be a growing tendency in some circles to give undue weight to this association, which is perhaps more imaginary than real. It is in the nature of men always to find fault with others, specially when

they are weak, and ascribe every occurrence to some known or unknown cause. From this natural weakness they become prejudiced against the latter as a class on the basis of something, perhaps real, originally which might have occurred as mere accident, but which subsequently, forming a ground of belief, serves to strengthen their predilection and fanciful bias. Ganja smoking is admittedly confined to the lower class of people. One of a higher class on every occasion and on every trifle showers upon them all bad names and abusive languages, such as "sala," "badzat," "paji," and so forth, and this is done with impunity and without a retort even. These epithets and invectives do not seem to have any origin, except the fact of these people being lower and weaker. If, under such circumstances, one of these happen to be guilty of any crime through stupidity, i.e., say, being under the influence of ganja, the stronger or one in power cannot remain satisfied by calling him a "gadha" only, but calls him a "ganjokhor" at the same time, ascribing his crime to ganja smoking; and thus every similar occurrence, that is to say, every occurrence denoting stupidity or want of sense, naturally calls forth this epithet in addition to what more such epithets one may like to use. Hence ganja, possessing the stupefying property, all stupid actions, in course of time have come to be associated with its influence, and hence the prejudice and predilection; and this is also the reason, I think, why professional experts are found to have a leaning towards a version which accords well with this popular idea and popular notions and prejudice. I know of no instance in which any person of the higher class, being charged with any offence or being subjected to a fit of insanity, has raised any ganja plea or any plea giving occasion to discussions on the properties of ganja or any such drug. There are yet many respectable persons—respectable in the sense of being a high caste Brahmin, etc.—who are habitually ganja smokers, and who, though guilty, being under the influence of ganja, would never raise that plea or allow it to be raised. It is only in cases of offences committed by the lower class that any question on the score of ganja or any such drug arises.

53. It may, as is probably the case with every other intoxicating matter when carried to excess. As already hinted, temporary homicidal frenzy is not, I think, the property of ganja or such other drug. It is only under peculiar and exceptional circumstances that such is or appears to be the case.

54. It may be so; but this fortification is not necessarily to create a desire, but it is rather to fulfil and execute a pre-existing desire, to add strength and vigour to the force of the desire by intensifying the application of the mind.

55. I know of no such thing.

56. Anything sweet to the taste, such as milk, sugar, honey, etc., if mixed with bhang, adds to its intoxicating power. As already noticed above, ganja being of the same class with bhang, it is likely sweet things add to its power. From what I know, dhatura is never used as an item of requirement. It is always used, so far as I know, purely for medicinal purpose.

57. Ganja and charas I have never known to be eaten or drunk. That is not the practice in this district, at least so far as I know.

62. As already said, hemp plant and bhang plant are two different things, so far as I know.

I am far from thinking that the growth of bhang plant should be in any way controlled, nor I think it would be feasible.

68. Intoxication can be controlled, and ought to be controlled, but it cannot be checked or prohibited. It is desirable, therefore, that licensed vendors of such drugs should be as limited as possible. To

my knowledge there are no licensed shops or houses in this district which afford shelter to men addicted to the habit of smoking ganja, charas, etc., or drinking, or which allow persons of such habits to gather and enjoy. In Bengal, at least, licensed abkari shops are hardly seen to be converted into brothels, where all sorts of gatherings and amusements are allowed.

186. Evidence of BABU KALI PRASAD SINGH, Rajput, Zamindar, District Bhagalpur.

1. No other opportunities than coming in social contact with the persons of our neighbourhood who smoke the hemp drug.

2. These definitions may be accepted for our province. These names are given to the articles here.

3. Our knowledge is mostly confined to this district only. Ganja is not grown here, but we hear it is largely cultivated in Rajshahi District. We further know that bhang is spontaneously and abundantly grown in the North Gangetic part of the district.

4. Bhang is produced here and is known as bhang only. The names ganja, siddhi, and charas are also known to the public.

5. We cannot fully answer. Bhang needs damp climate and sandy soil.

6. Bhang is densely grown in the North Gangetic part of this district.

7. In the North Gangetic part of this district. Bhang only grows spontaneously and is not cultivated for any purpose.

12. Ganja is not produced here.

14. Ganja and charas are not prepared here. Bhang leaves are plucked from the plants, ground in water and drunk. No other preparation is in use here. Bhang-drinkers are limited in numbers in this part of the district.

16. Bhang is generally prepared by the people in their houses. Cannot answer the rest of the questions.

19. Ganja and charas are only smoked as far as we know.

20. All classes in the proportion of 15 per cent. smoke ganja. Charas is not smoked here as it is not procurable.

21. All kinds of ganja—flat, round, and chur—are smoked here.

22. Charas is not used here.

23. No.

24. All classes in the proportion of 5 per cent. or even less drink bhang in all parts of the district.

25. The use of ganja is daily increasing; we see the increase among our neighbours.

26. (a) 5 per cent.

(b) 5 per cent.

(c) 3 per cent.

(d) 2 per cent.

27. All classes of people, generally the labouring class and the fakirs.

28. (a) One pice in weight.

(b) From half chatak to one chatak.

29. Ganja is smoked with dried tobacco leaves and pepper is mixed with bhang.

Almond, dhania, aniseed, kasni, carrot seed, cardamom are only known to us to be ingredients of bhang massalas. Bhang massala is only used to make the drug more delicious.

30. We cannot answer the extent to which ganja and bhang are used in solitude or in company; naturally the use in company is greater. It is confined to male sex only. Generally the majors use; their children never use.

31. In company the habit is easily formed. It is difficult to break off. Company generally affords tendency for the moderate habit to develop into the excessive.

32. The Holi or Doljatra day and Bejai Dasami day are generally the days when bhang is generally used. Ganja use is excessive whenever its smokers collect in large number.

33. The use of ganja and bhang is generally in disrepute. Its plant is not worshipped here.

34. We are of opinion that to forego the consumption of ganja and bhang would be no privation to any class of the consumers.

35. The use of ganja and bhang can be easily prohibited. If practicable they will be illicitly consumed. It can be enforced by prohibiting the cultivation of its plants. There will be no discontent and no political danger. The prohibition will not be followed by recourse to alcoholic stimulants.

36. No. Hemp has no connection with the alcoholic stimulants.

29. Drinking of bhang is less injurious than the smoking of ganja.

40. Bhang only is used in treatment of cattle disease.

42. Excessive use of ganja makes the man insane, and of bhang stupid.

43. Yes.

45. The habitual moderate use of ganja and bhang is injurious to physical and mental faculties. It impairs the constitution if rich food is not provided. Does not injure digestion or cause loss of appetite. Bronchitis or asthma is contracted by it. Use of ganja produces insanity both temporary and permanent. We cannot answer the rest.

46. Ditto.

47. Habitual moderate use of ganja and bhang is not hereditary habit and does not affect the children.

48. Ditto.

49. and 50. Cannot say. If strong nourishing food is not provided, it produces impotence.

51 and 52. The use of ganja and bhang has generally no connection with any kind of crime.

53. No, as far as we know.

54. Yes, generally by thieves.

55. No, unless any other stupefying drug be mixed with it.

58. We have nothing to say against the present system of excise administration in respect of ganja, except that the dearer the drug is made the less will be the consumption.

60. Ganja is not produced here.

61. Charas is not produced here.

62. Ganja is not produced here; bhang is indigenous and cannot be controlled.

63. None.

64. None.

65. We say again the dearer the drug is, the lower its consumption will fall.

66 and 67. We have no opinion.

68. There are ganja warehouses and ganja and bhang shops and we have no opinion.

69. Wishes of the people are not consulted.

70. Ganja or bhang is not imported or smuggled from Native State into this sub-division. Gangetic Pandas, who come from places near the source of the Ganges, generally bring small quantity of charas to be given as presents to their *jajmans* in this part of the country.

187. Evidence of BABU GOPAL SINGH, *Zamindar, Kumarsar, Bhagalpur.*

1. I have seen people using bhang and ganja, and also seen bhang plants.

2. Bhang and ganja are used here and are known by these names.

3. Hemp plant grows wild in all districts.

4. Bhang known here as bhang or sabzi, and ganja is known as ganja.

5. Ganja is not grown here, but bhang grows in *bhit* lands.

7. No.

12. No.

13. Ganja is not cultivated here.

14. Bhang is cut and gathered and kept for use.

15. Ganja is smoked. There is no cultivation of bhang.

16. Bhang is prepared by the people in their own houses.

17. Bhang is prepared generally by all the castes.

18. Bhang loses its effects when it becomes old.

20. Ganja is used by the lower class of people.

23. Bhang is sometimes used for smoking by the lower classes.

25. The use of bhang is decreasing daily owing to the fear.

27. Bhang is taken by all the classes of people.

28. Mathura Chaubes spend more in taking bhang.

29. Black pepper and rose are ordinarily mixed with bhang.

30. Bhang is only used by the male.

33. The consumption of these drugs is blameable. There is no custom of worshipping the bhang and ganja plants.

34. Mathura Chaubes and bairagis would suffer by giving up bhang.

39. I have not seen any people suffering from the injurious effects of bhang-drinking.

41. The bhang consists of digestive power.

42. The use of bhang is not beneficial.

50. Excessive use of bhang produces impotency.

51. Ganja is used by the people of bad characters.

60 and 61. Ganja is not produced here.

62. Bhang is always grown here wild and not to be controlled.

68. There are many shops for selling ganja here.

69. No.

188. Evidence of BABU AMAR PRASAD SINGHA, *Rajput, Zamindar, District Bhagalpur.*

The replies given by this witness are exactly the same as those given by Babu Kali Prasad Singh (No. 186) and are not reprinted.

189. Evidence of MR. L. H. MYLNE, *Zamindar and Indigo-planter, Justice of the Peace, President of Independent Bench of Honorary Magistrates, Chairman of Jugdispur Municipality, District Shahabad.*

1. I have no special knowledge of the subject, nor special facilities for securing it, except such as my position as a landholder affords.

2. Bhang is applied to the dry leaves of the male hemp plant whether cultivated or not.

Charas is applied to the resinous essence of ganja tips mixed with jaggery and other ingredients.

Ganja is the dried flowering tips and adjacent leaves of cultivated female hemp plants.

Flat ganja is prepared by stacking these tips or tops in a stack 10 or 12 feet high. As each layer is laid it is pressed under foot.

Chur or broken ganja is made from flowers, leaves, etc., which have become detached in the process of stacking and unstacking. Round ganja is rolled by hand, not trodden under foot.

Yes; flat ganja is known as "chapta ganja" and round as "gol ganja;" the third as "chur."

7. Not in this district of Shahabad.

18. These drugs keep very well for eight months in the year, but deteriorate and lose their strength during the rainy season. They won't keep for an indefinite length of time.

19. Ganja and charas are used only for smoking.

20. Charas is not used in localities near us. Ganja is used more or less by all castes and classes. Sadhus and fakirs (religious mendicants) smoke most heavily. It is said these use it chiefly to deaden sexual appetite.

21. The flat kind, as it is the most potent.

22. No charas is sold or used in this neighbourhood.

23. Bhang is not used for smoking.

24. Bhang is not usually eaten. Mixed with pepper and sugar in water it is used as a sherbet or drink.

25. The use of these drugs is on the increase. About 10 years ago there were three licensed shops in this Municipality which paid excise tax of Rs. 25 monthly each; now there is one paying Rs. 135 a month. The licensed sellers know that young boys of 10 or 12 are taking to it more than formerly.

26. Most of the adults in this town, or at least one-half, are moderate habitual consumers. Half a dozen men in the country round about are known to be habitual excessive consumers. There are hardly any occasional consumers, for once the habit is formed it must be daily gratified.

27. All castes and classes are addicted, from the poor or rich Brahmin and Rajput to the poor or rich Chamar and Dosadh. There are no particular habits of life or circumstances which lead to the habit or practice. Indulgence on a few occasions leads insidiously to the settled habit, which must be satisfied.

28. (a) Two katcha pice worth ($\frac{3}{4}$ th of an anna) will purchase five rattis weight $= 5 \times 1\frac{1}{8}$ = about $9\frac{1}{2}$ grs. troy.

(b) Will consume four times as much as (a), and sometimes on special occasions a good deal more.

29. (a) With ganja, ordinarily "khaini" or tobacco for chewing.

Dhatura is never used.

With bhang are mixed sounf (aniseed), ground peppercorns, the seeds of cucumbers, rose leaves, and sugar. These admixtures are said to prevent the heating properties of the bhang and to reduce the intoxicating effects. This mixture is taken with water as a sherbet or as a "quid" for the mouth.

30. Chiefly in company, and is confined to the male sex of all ages above 10 or 12 years.

31. The habit is very easily formed after indulgence twice or thrice. The habit is difficult to break off, and there is a tendency for the moderate habit to develop into the excessive.

32. It is quite the custom, if not actually incumbent on every male person, to take some one of these intoxicating drugs on the day of the Holi festival. Bhang is chiefly used.

There is a shrine or grave in the neighbourhood called the "Doodnath," where a sadhu addicted to the use of these drugs died generations ago. Many people take vows at this grave or shrine on the Holi day, and offer up ganja and bhang to the

spirit of the sadhu. Such offerings may be and are made on other occasions also.

33. There is no religious or social feeling against the consumption of these drugs, nor does any disrepute attach to the practice.

The hemp plant is not worshipped on certain occasions more than other crops are.

34. The privation would not be serious. Those addicted to the consumption of these drugs would feel the want of them for a few weeks, and would be disinclined for exertion of any kind till the craving wore off. No serious harm would result.

35. Prohibition could be easily enforced as in the case of opium, and illicit consumption would not be general. There would be no serious discontent, and certainly no political danger, at any rate in rural tracts. The prohibition could not be followed by recourse to alcoholic stimulants in the case of the higher castes, who must not touch alcoholic liquor of any kind. Such castes might take to opium, but this is doubtful; the lower castes would generally take to alcoholic stimulants.

36. I don't think this is the case. For intoxicating purposes these drugs are cheaper than alcoholic stimulants, even though their effect is not probably so lasting.

37. Charas-smoking induces severe headaches and affections of the air passages, causing cough and phlegm. Not so ganja.

38. Except that flat ganja is the strongest and chur the weakest, the three kinds produce the same effects in different degrees.

39. In smoking ganja there is more harm done than by eating or drinking bhang. The latter increases the appetite for food; the former tends to destroy it. Bhang has a beneficial effect on the physical frame; ganja reduces the physique, bodily and muscular. One reason given is that ganja is smoked unmixed with softening ingredients; another is that the act of smoking is a tax on the heart and lungs, whereas mere eating or drinking bhang involves much less exertion.

40. Very seldom bhang is prescribed as a febrifuge. Bhang mixed with "sattu" (ground gram) is sometimes given to fatigued cattle after extraordinary exertions with very good effect.

41. (a) Bhang acts as a fillip to the appetite, not so the others.

(b) Bhang is taken more to comfort the system as it were than to give staying-power or alleviate fatigue.

(c) Occasionally used as a febrifuge.

The moderate habitual use of the drug is referred to above.

42. The consensus of opinion available near me is that the moderate use of these drugs, especially bhang, is not harmful.

43. Yes.

44. Very slight intoxication. The effect is more soothing than refreshing. Ganja spoils or weakens the appetite. Bhang increases it. The effects last about two or three hours. The after-effects are disinclination for physical exertion.

45. No noxious effects are produced from the habitual moderate use of these drugs.

46. Habitual excessive use induces affections of the lungs, throat, and air passages generally. The constitution is impaired and the body be-

comes emaciated. Laziness is induced, but not immorality or debauchery. The intellect is not deadened, nor insanity produced.

47 and 48. The habit moderately or excessively indulged in is not hereditary, nor does it apparently affect the children of either class.

49 and 50. No; they are not used for this purpose by men nor by prostitutes.

51 and 52. No.

53. No; it has the opposite effect. Excessive indulgers become quiet and helpless.

55. Yes, but after dhatura is mixed with the hemp drugs.

56. See answer to question No. 29.

57. Ganja and charas are not eaten or drunk in this neighbourhood.

65. The tax might reasonably be increased for these drugs, because intoxication by using them can be produced at much less cost than by using the country alcoholic liquors, even though the effects of the latter are more durable.

66. No; one rate of taxation is the most suitable, though chur ganja, being less potent, might be more lightly taxed than the others.

68. Not in this municipality

69. No, but they should be.

190. Evidence of MR. F. G. GIBSON, *Indigo Planter, Jessore.*

1. From local information.
3. It is not grown here.
4. Siddhi, bhang, charas, ganja.
5. It grows in moist and shady places.
6. More or less scattered.
7. No; there is no cultivation of the hemp plant in this district.
8. No.
11. Not cultivated.
14. None prepared here, so far as I can ascertain.
16. It is drunk, or eaten in pellets, and occasionally it is smoked.
18. I have been told it deteriorates by keeping.
19. Ganja and charas are used for smoking only.
20. Coolies and syces are the class who use ganja mostly. Charas is used very little here.

21. Flat ganja is prepared for smoking.
22. It is imported.
23. Bhang is never used for smoking.
29. Ganja is mixed with tobacco for smoking.
30. It is consumed in company, and is mainly confined to the male sex. It is not usual for children to consume any of these drugs.
31. It is easily formed, and the habit once formed is not easily broken.
32. It is taken by most classes during the Pujas.
39. There are no other preparations of this drug, except for smoking and drinking. From enquiries made in the district.
41. I believe it helps a man to sustain greater fatigue, especially during wet or cold weather.

191. Evidence of MR. JOHN D. GWILT, *Tea Planter, Longview Company, Limited, Darjeeling.*

1. My answers are based on facts collected from the people living in my vicinity and from the work people of this company. The workmen here are for the most part Nepalese, a few being Beharis, and possessing, it seems, a better knowledge with reference to this drug than the former.

2. The three names, *viz.*, ganja, charas and bhang, are, it appears, pretty generally understood by almost all classes of people here, and the definitions given in question No. 2 can be accepted for this part of the district.

3. I have no special knowledge about this, but I understand that the soil of the Rajshahi District in Bengal is specially favourable for the growth of this drug. A plant belonging to the species of *Cannabis sativa* grows wild in this part of Darjeeling, and is known by the name of wild chang.

4. It is known by the names of wild chang. It is believed that this name refers to the same plant, possessing, as it does, more or less all the properties of the bhang of Bengal.

5. Any elevation below 3,000 feet and a soil having a little vegetable mould in it may, in my opinion, help the growth of this plant, the rainfall and climate, as a rule, not being of very special importance.

6. The growth is rather dense than otherwise where it occurs.

7. There is no cultivation of ganja in this part

of the district, and the people here do not know what use to make of the hemp.

8. There is no cultivation of it.

11. I have not heard of the wild hemp plant being specially cultivated for the production of ganja.

12. The ganja is not cultivated in this part of the Terai, and this being the case, I am unable to offer any information with reference to this question.

14. None to my knowledge.

15. I can offer no particulars on this subject.

16. To the best of my belief, no one cares to try and prepare bhang in their own houses. It is believed that bhang can be prepared from the wild hemp plants, but people here do not know how to do it. It is doubtful whether ganja and charas can be prepared from these plants.

17. I have never known Nepalese to prepare the hemp drug; it is brought prepared by the plains men.

18. The drugs deteriorate by keeping, but do not altogether lose their effect.

19. I have not known them used for other purposes than smoking.

20. Mendicants use these drugs mostly. The proportion of the people who smoke ganja here is exceedingly small.

21. The more resinous matter there is in each kind, the better it is liked.
22. Cannot say.
23. I have not seen it used for smoking.
24. The Marwari class use bhang. I cannot state any proportions.
25. I should not say their use is increasing.
26. People who use the drugs in this district are decidedly moderate consumers.
27. Not known.
28. Cannot say.
29. Bhang, I know, is mixed with sugar and consumed like tea.
30. Men mostly use these drugs. I never heard of children taking them.
31. I should say the use of these drugs is hereditary to a great extent, and the moderate habit seldom develops into the excessive.
32. Do not know.
33. The moderate use of these drugs is, in no way, in disrepute.
34. Yes; I think it would be a serious privation, as those accustomed to the drug take it regularly, and state they cannot do without it.
35. It would be, I think, feasible to prohibit the use of these drugs. Of course, it would create a little discontent amongst those who habitually use the drugs, but their numbers are so few that such discontent could not amount to a political danger. The prohibition would most likely lead to recourse to some other drug or to alcohol.
36. I do not think alcohol is being substituted for these drugs. The use of alcohol amongst the Nepalese is a curse. This cannot be said of the use of the hemp drug.
37. I do not know.
38. The effects seem all the same.
39. I cannot say.
40. The native doctors of the old school are in the habit of prescribing this drug on account of its medicinal effects. It is used in the treatment of cattle-diseases.
41. The moderate use of these drugs seems to do no harm. The people who consume them state they act as a food accessory; that they do give staying-powers and alleviate fatigue; that they are also of use in unhealthy tracts of country, and there is decidedly a certain amount of truth in these statements.

42. The moderate use of these drugs seems to be beneficial to some people, and they state the drug acts as a stimulant.
43. Consumers are stated to be inclined to be irritable, but not offensive.
44. The immediate effect is to refresh the habitual consumer, but the effect is not lasting; it acts as a stop-gap when food cannot be procured by retarding waste of tissue.
45. The habitual moderate use does not seem to impair the constitution. I never met any one insane from the use of these drugs.
46. In the habitual excessive use of these drugs, the patient gets into a comatose state, complains of burning pains, and says he must have milk, which alleviates him; the body has a dried up appearance.
47. The use seems to be hereditary, and does not appear to affect the children.
48. *Cannabis indica* is a powerful aphrodisiac, and is given by native doctors. The excessive use of hemp is stated to produce impotence.
49. This is not known to me.
50. I have not heard of it doing so. No; I do not know of any case.
51. I have not heard of it being thus used.
52. Cannot say.
53. The present system of excise administration in this district in respect of hemp drugs is, as far as I understand, working satisfactorily, and does not in my opinion call for any change.
- 54 and 55. I do not consider any modification necessary.
- 56 and 57. I suggest no change.
58. I have no objection.
59. Much more harm is done by alcoholic intoxicants than by the hemp drug. I hear of more harm in a week by the use of the former than I do in a year from the use of the latter. If anything was taxed more, it ought to be alcohol.
60. I should not say it would be necessary.
61. No objection.
62. As far as I understand, there are regular shops in this district for the sale of these drugs.
63. The wishes of the people, I consider, ought to be decidedly consulted before liquor shops are opened. But the use of the hemp does not amount to an evil in this district.
64. None that I know of.

192. *Evidence of MR. JNO. RUDD RAINEY, Proprietor of "Khulna Estate,"
Khulna.*

1. No special opportunities or knowledge of the subject. I merely answer such questions as I am able to do, as I have been asked by the District Officer to do so.
3. In Khulna and the adjoining district of Jessore, to my knowledge.
4. As far as I am aware, it is only known as bhang.
5. In low-lying lands and moist climate.
6. In dense patches here and there.
7. I believe so, but I do not know to what extent.
9. I do not know anything about it.

13. I believe so, but I have no certain knowledge of it.
14. I believe they are, but I have no certain knowledge of it.
15. I am unable to do so.
18. I believe they do deteriorate by keeping, owing to atmospheric moisture, but do not know of any special measure that might be adopted to prevent such deterioration.
23. I do not know if it is used at all for smoking.
25. I believe they are on the increase, but I have no certain knowledge.

30. Mainly, I believe, to the male sex.
31. I believe it is easily formed and difficult to break off.
32. I believe some sect of Hindus take it on religious grounds.
33. I believe it is generally regarded as baneful.
34. To habitual consumers of the drug its prohibition would be a privation for a time at least, but would be beneficial to them eventually, I think.
35. It would, I think, be feasible to prohibit to a certain extent.
36. I do not think so.
38. I believe they have different effects, but have no precise knowledge on the subject.
41. I do not think so.
42. Certainly not harmless.
43. I think they are offensive to their neighbours who do not indulge in the drug, though probably not to any appreciable extent.
44. I believe it does intoxicate.
45. I believe it injures the constitution generally, but I do not know in what way, or to what extent.
47. I do not think it to be a hereditary habit.
49. I believe it is, but I do not know to what extent. Prostitutes are said to use it freely.
51. Bad characters generally have the reputation of being habitual consumers of these drugs.
53. I believe it does to a very great extent.
54. They are said to use them for such purposes.
55. I believe so to some extent.
56. Bad in moderation, and excessively so when in excess.
57. I have no experience about it.
58. I am not well acquainted with the present system of excise administration.
62. It should, and I think could, be controlled.
69. I doubt if the people are consulted, but have no certain knowledge of the subject.

193. *Evidence of Mr. A. G. M. WODSCHOW, Assistant Manager, Indigo and Zamindari, Dumur Factory, Purnea.*

1. Having occupation for over 23 years in the Purnea and Bhagalpur districts in zamindari and indigo, and always dealing with the natives.
2. Ganja flat, and ganja broken, and bhang that grows wild all over near villages and rich soil.
3. The wild hemp bhang in Purnea and portions of Bhagalpur.
4. Bhang, not ganja.
6. Generally dense, and in places grows to over six feet high.
7. None.
- 11 and 12. No.
14. Bhang, wild hemp.
- (a) No.
- (b) No.
15. Bhang (wild hemp) leaves are sometimes dried and kept, but by very few, and a drink is made by pounding the leaves, mixing the same in water, and adding sugar. This is very intoxicating.
- The pounded leaves are also mixed with water, adding some pounded round pepper. Not very intoxicating.
- The juice extracted from the green leaves is also used in making the same drinks as above. This is intoxicating.
16. Bhang is always prepared by those who want the drink in their houses or anywhere. Do not know and have never seen ganja or charas prepared from the wild hemp.
17. By Hindus and Muhammadans, mostly men from the west and north-west (called up-country men in these parts).
18. It does not deteriorate. I hear bhang is dried and tied in a bundle and kept in a dry place.
19. Ganja is only used for smoking.
20. All men, mostly Hindus, and of the poorer class, and over 40 per cent. It is less used to the east and north-east of this district.
21. Whatever is to be had.
23. Not known to me.
24. By all castes, and mostly by the higher class all over the Purnea and Bhagalpur Districts. By few under two per cent. of men.
25. None on the increase, and a wonder bhang is so little used, though not taxed.
- | 26. Ganja— | Bhang drink— |
|------------------------|------------------------|
| (a) About 50 per cent. | (a) About 50 per cent. |
| (b) „ 10 „ | (b) „ 10 „ |
| (c) „ 40 „ | (c) „ 30 „ |
| (d) — | (d) „ 10 „ |
27. Ganja.—By hermits, travellers, and the poorer class of workmen, who say it is a relief after work and keeps hunger away.
- Bhang.—By the better class, mostly up-country men, Brahmins and Rajputs especially; they say it is a cooling drink.
- | 28. Ganja— | Bhang— |
|-------------------|------------------|
| (a) About 3 pice. | (a) About 1 pie. |
| (b) „ 2 annas. | (b) „ 1 pies. |
29. See No. 14 answer. Dhatura is very seldom used by consummate bhang drinkers to encourage intoxication. I know of no bhang massala prepared and sold for mixing.
30. Ganja is used in company, especially among the poorer class, and in solitude by the higher class and by the male. Not known of children.
- Bhang drink is seldom taken in company, as so few take it, and by only men. Not women or children.
32. Excessive ganja-smoking is injurious.
33. Hemp plant is not worshipped.
35. No; if so, would be consumed illicitly, and prohibition would cause grumbling among consumers. It would not cause political danger.

40. Ganja.—In cases of pain in the stomach, Bhang is at times administered to cattle as a medicine.

43. I have known of no cases of any ganja consumers being offensive to their neighbours.

Bhang.—One of my servants, who drank bhang prepared from the green leaves with seed, was slightly excited and offensive to the others.

44. Ganja-smoking makes them quiet for a time; they say it is a relief after hard work and allays hunger.

Bhang, a good drink; they say is very refreshing; it sometimes gives a little excitement; seldom, unless excessive, intoxicates.

45. I do not think bhang drink or ganja-smoking moderately causes laziness or habits of immorality or debauchery.

46. Smoking ganja strong does produce temporary insanity, as also does strong bhang mixture.

55. Yes.

62. Wild hemp or bhang grows wild; it would be impossible to control the growth, and the police (native) would always trouble raiyats where bhang is growing.

64. None.

65. Yes, on ganja. No tax on bhang.

68. Yes; for sale of ganja.

69. Yes, the vendor first consults the villagers, and then petitions the Magistrate. Local opinion ought to be considered. Any planter or zamindar having any objection to the shop in certain places, on giving reasonable grounds, can have it removed by petitioning the Magistrate.

194. Evidence of Mr. H. L. WEATHERALL, Zamindari Manager, Dacca.

Oral evidence.

I have been in the Dacca Division for 22 years as manager of the private estates of the Nawab of Dacca, and have visited Mymensingh and Tippera in the course of my duties. I have lived six or eight months at a stretch in the districts among the people.

The hemp plant does not grow obtrusively. I have noticed it here and there. I have seen small quantities in clearings in the Bawal forests. I have never seen it apart from habitations. This inference seems to be that the plant is not indigenous, but gets propagated by human agency. I have never seen as large a patch of it as one acre. I have seen small quantities growing with tobacco in the yards of houses, especially in forest clearings.

The hemp drug is consumed mostly by the fishermen, boatmen, and dooly-bearers, and the class of water gypsies who call themselves *bedyas*. The religious mendicants use the drug in excess. A large proportion of the other classes I have mentioned use it, and use it in moderation, but the proportion of the whole population is decidedly small.

I have never observed any deleterious effects on the health of the people who use the drug. Those who take the drug in excess, such as the mendicants, seem to do nothing but smoke all day long and to be of little use for any thing else. The moderate consumers who are hard manual workers seem to be better for the drug, and to be enabled by it to stand more fatigue.

I certainly think there is no case for total prohibition of ganja. Nor should I think there was any

call for restricting the use of the drug more severely than is done at present. The present system has been working admirably all these years, and there is nothing calling for reform. There is always a certain amount of smuggling going on, but it is not very noticeable. I think the wild drug is to some extent used. They cannot make ganja out of it, but they can probably make something which they can smoke. It would be very inferior to excise ganja.

A ganja smoker is not looked upon as a moral leper, nor is he regarded as unfit for manual or other employment. A ganja smoker is a marked man as a liquor drinker is, but nothing more. The liquor habit is regarded with greater repugnance. I am not aware of a strong feeling against the drug in any quarter. A man who does not use the drug is regarded as of superior character. There is a popular idea that the drug produces insanity. I have not seen the asylum returns, but I heard something of the subject from Dr. Wise, who thought he had traced some connection between the drug and insanity. The popular belief would cause the parents in a respectable family to view with alarm the adoption of the habit by any member of the family. The regular consuming classes would have no such fear. I have not myself formed any opinion on the subject. I have seen lunatics about whom it was said that ganja was the cause, but I am unable to say what ground there was for the statement.

The people of this part of the country, of whom a large proportion are Muhammadans, are a sober and temperate people in regard to the use of intoxicants of all kinds.

195. Evidence of BABU GAURI SHANKAR, Manager, Bachour, Darbhanga.

20. Charas is almost unknown to this district. As akin, however, to ganja, and as a mixture in which ganja is the principal component its attributes, concomitants and effects might well be put down to be the same as those of the ganja.

Ganja and bhang are both freely consumed in the district. They are not confined to any special class of the population. They find favour with a great many of the non-spirit consuming

Hindus of all grades and denominations. They are used moderately.

41. The object and the pleasures of these drugs may be thus described:—

Bhang.—The object is twofold—(1) medicinal, and (2) pleasure-giving.

Medicinally, bhang is reported to be eradivative or at least palliative of constipation, and

to alleviate the pains of piles. It is used in many other cases of other ailments.

(6) Used as a drug in a moderate measure to give pleasure, it is considered to be less injurious to health than the country grog. The pleasure derived from its use is different from that enjoyed by taking spirituous liquors. It is difficult to propound the difference. Mainly, however, while the former enlivens, the latter stupefies. While the former brightens up memory and aids the conversational powers of the user for the time being, the latter invariably dulls them.

Ganja.—Medicinally ganja is reported to cure cold and all complaints arising out of cold in the human system. It reduces fat and corpulence. As an intoxicant, it is notorious for its rapid action and effect. One pull or two suffices the novice for hours. One or two pulls is considered enough for a couple of hours for a hardened user. Compared with bhang, ganja is more stupefying and dulling than even bhang.

To draw now a parallel between the two drugs. Bhang (siddhi) acts slowly; ganja (as its other name "Turita" signifies) acts instantaneously. Unless an occasional dose of an antidote (roving mendicants use such antidotes) is taken, the excess use of the latter affects the brain more rapidly than an excess use of the former. Both produce nervous debility.

28. One-fourth to half a tola of ganja and one-fourth to half a chittack of bhang a day is considered a moderate use. The price of ganja fluctuates according to the Government charge of the drug. The bhang is obtained in this district for no price.

The present price of ganja is annas 3½ to 4 a tola.

31. The moderate use of these drugs does not necessarily lead to an excessive use.

32. Yes; Holi festivals and marriage times.

29. With ganja, dried tobacco is used to strengthen it; also scents to give a flavour to it.

With bhang, curd, milk, sugar, pepper, and at times spices, are mixed up. These articles, especially the sugar, serve to keep up intoxication for a longer period. These admixtures may not be termed noxious, but they add strength and relish to the dose. With bhang, people add sometimes dhatura and the flower of *akand* to make it more intoxicating.

55. I am not aware of any.

35. No. The moderate use of these drugs does not lead to any serious consequences. If prohibited people of the country who do not have recourse to spirituous liquors will fall upon them, and the result will be worse. Users of spirituous liquor run into excesses more expeditiously than the moderate users of these drugs.

59. I think that no buyer of an exciseable article, be that article bhang, ganja, opium or grog should be allowed to use it at the vendor's shop. I think also that no vendor should receive in price any goods, chattel, cloths, ornaments, or grain but should always demand ready money. No vendor should sell an exciseable article on credit.

Bhang in this country is a non-exciseable article. It grows wild. Its possession in any quantity should not be declared illegal.

196. Evidence of BABU SASI BHUSAN ROY, Manager, Dubalhati Raj Estate, Rajshahi District.

1. The ganja tract in the sub-division of Naogaon, district Rajshahi, forms an important part of the zamindari of late Raja Haranath Roy Chowdhury Bahadur of Dubalhati. The mahals are all within a distance of about ten miles from the Rajdhani where I stay. There are about 2,000 bighas of land under ganja cultivation. I have been the Manager of the Dubalhati Estate for the last fifteen years, and have been familiar with these tracts all this time. Those that carry on the cultivation of ganja are ordinary tenants, and so I have got very constant opportunities to come across them, and have thereby gained some experience with regard to the cultivation and manufacture of ganja.

2. These definitions may be accepted in Bengal, and they are locally known by these names.

3. There is no district of Bengal and Behar in which the wild hemp or bhang does not grow; but I can say with some exactness of the districts of Faridpur and Rajshahi, and I know that in all these districts hemp grows spontaneously and in abundance. I have got sufficient experience of these two districts.

4. They are generally known by the name of bhang, siddhi or patti. They all refer exactly to the same plant.

5. Without sufficient scientific knowledge it would be hazardous to try to answer this question. But what I can say from my own experience, is that high lands, on which water does not rise even in years of highest flood, are congenial to the growth of the wild hemp.

6. Dense.

7. In the district of Rajshahi, which is by far the most important ganja district of North Bengal, there is no cultivation of hemp plant for any purpose other than that of production of ganja. The area under ganja cultivation in the Rajshahi district is about 2,000 bighas.

8. I believe, on the average, there has been no such variation.

9. The preparation of ganja field takes a longer time and requires greater care than that of other crops. The cultivators select fields for raising ganja in the months of Magh and Falgun. Open fields which are not under the shade of any large trees are taken up for this purpose. The first act for the preparation of such field is to plough up the land with a view to weed the soil of its herbage. This ploughing is not commenced before the latter part of Falgun, and it takes place at intervals of three or four days. After the land is sufficiently ploughed for the first time to destroy the noxious plants, the process of *bharakata* is taken up. This means giving fresh earth, from the surrounding ditches and sometimes from land close by, on the field; a basketful of about 12 seers being considered sufficient over an area of about one square cubit, care being taken to take this earth just from the surface. Then comes the process of *chalikata*, which consists in throwing up of the sods, from the sides of the field under cultivation along with the grass and other weeds which grow in abundance on the field. The cultivators then commence to manure the land in the month of Baisakh and Jaista with cowdung, house sweeping, etc.

Thus, after manuring and by repeated ploughing, when the land is sufficiently pulverised and becomes fit for receiving the seedlings, ridges are made all over the field at equal distances of one cubit each. The seeds are first sown in the month of Bhadra in a separate field, which I think may be called the *nursery*. When the seedlings grow to the height of about a foot, transplantation begins. They are planted upon the ridges described above at a distance of about six inches.

Transplantation is never delayed beyond the month of September. Here it would be worthy of note that the ridge-making and the transplantation of the seedlings should be completed in the course of one and the same day, otherwise the soil so well pulverised would scarcely retain any moisture to receive the young plants.

The seed beds or nurseries mentioned above are never manured and the ground is never covered, as is generally done with the plantation of cabbages, nor is the field irrigated. Rains are very injurious for both the seeds in the nursery and the seedlings shortly after transplantation into the field. The seeds take about a week's time to sprout forth. If heavy downpours set in after sowing the seeds in the nursery, or the transplantation of seedlings into the field, a second sowing or plantation, as the case may be, becomes necessary. When the roots of the seedlings have taken hold on the soil a second manuring is done. But this time the cultivators generally use cowdung and oil-cake who can afford it. When the young plants grow to the height of about two feet they are trimmed. The attention is directed only to the removal of the lowest branches, with perhaps the intention of ensuring the upward growth of the plants.

In the first week of Agrahyan or earlier, according to the growth of the crop, the cultivators employ ganja doctors, who are locally known as *poddars* or *parakdars* to inspect the ganja field, and this they continue to do till the middle of Pous, in order to destroy the male plants before inflorescence, because they make the female plants, which yield ganja, run into seed.

The operation of trimming is renewed in the middle of December. When the fields wear a dry look, cultivators begin to water them. The cultivators evince great care to keep the soil moist, which is generally sandy loam. In January, when the plants attain sufficient maturity, the cultivators cut and remove the crop from the field to the place of manufacture. It is done generally in the morning. The stalks are then spread out in the sun and suffered to lie there till it is quite midday, when they are properly covered. When the evening comes on, the coverings are removed and they are left exposed to the dew. So the stalks remain till the noon of the following day. Now comes the threshing of the flowering tops. A mat is spread on a very plain ground, on which the stalks are all marshalled in a circular form called *chakat*, the tops all pointing to the centre. A mat is then spread over the file, and four or five persons ascend and begin to trample upon them. Pressing in this way goes on for about five minutes, when the men get down and, holding in each hand a stalk, begin to beat them against each other. It is done to remove the seeds from the tops. This process of marshalling and trampling is repeated twice more; but on the second occasion each twig is taken and pressed under foot separately. The cultivators then dry the stalks

after covering the top for a short while, when the ganja becomes ready for market. This is the process of making flat ganja.

The process of making the round ganja is nearly the same in the main. The difference, however, lies in this, that, instead of trampling with foot, the twigs are rolled. I must here note that for the first and second time the twigs are rolled with foot, and when they take a roundish shape they are for the third time rolled with hands to make them perfectly round. In the case of both round and flat ganja the process of trampling or rolling is repeated thrice. But in the interval of each of these the twigs are alternately dried in the sun and exposed to the dew.

The flower tops of ganja detached from the twigs, whether of flat or of round, and whether the detachment is accidental or deliberate, are called *chur*.

10. The persons who cultivate hemp in the district of Rajshahi belong to the ordinary agricultural class.

11. Never.

12. I am aware of no place where wild hemp or *thang* is cultivated for the production of ganja.

13. Yes. The cultivation is restricted to the districts of Rajshahi, Bogra and Dinajpur in the province of Bengal. In my opinion there is no special reason for this selection. But the cultivators of their own accord commenced the cultivation in the way of experiment, and afterwards, finding its return remunerative and the soil congenial to the growth of the drug, extended their operation.

I cannot answer this part of the question, as I have not got sufficient scientific knowledge of the matter. Its cultivation would be impossible in those parts which remain submerged under water throughout the greater portion of the year.

14. In the district of Rajshahi, and perhaps in other ganja districts of Bengal, the cultivation of hemp is carried on only for the purpose of producing ganja. So far as I am aware, there is nowhere either in the Eastern or Northern Bengal a regular cultivation of *bharg*. It is only a wild indigenous plant which grows without any care as all other weeds do. The answer to the last part of this question will be found in my answer to question 7.

15. The method of preparation of ganja, for smoking from cultivated hemp plants, will be found in the last part of my answer to question 9. The leaves of wild hemp plant are dried by exposure to the rays of sun for preparing *bharg* used for drinking. I am not aware of any other methods of preparation of these drugs.

16. (a) Yes.

(b) *Bhang* cannot be prepared from the cultivated hemp plant, as I learn from the cultivators.

(c) Whether hemp can be produced from wild hemp or *bharg*, as it is called, and *vice versa*, has, I apprehend, never been experimented upon. But I think such an experiment will not be wholly unprofitable. Hemp and *bharg* or *siddhi* belong to the natural order called *Urticaceae*, which includes several families of plants. Hemp belongs to the family called *Cannabineae*. I am aware of no botanical characteristics and classification of the wild hemp or *bharg*, nor I think there has been any recent researches concerning its properties. But I think I may safely say that, because both

hemp and bhang belong to the same natural order, and when both the species grow to the same height, and in all external appearance they present the most striking resemblance, and both the species undeniably possess the narcotic principle, and specially because the growth of wild hemp is never advanced by the destruction of male plants, wild hemp may, under proper care, become ganja. It may also be supposed that hemp, in its degenerated and wild condition, becomes what we call bhang or siddhi. I have myself seen that such bhang plants as have a luxuriant growth bring forth leaves, which sometimes get matted together, and, if collected before inflorescence, might, to some extent, serve the purpose of ganja.

17. The answer to question ten (10) applies to this question also.

18. The narcotic power of ganja deteriorates by keeping. It loses its active principle totally in the course of time, retaining its effects for about two years with ordinary care. I believe that this gradual destruction of its effects is simply due to the atmospheric influence; consequently if this drug be preserved in cases hermetically closed, the effect will keep intact for a comparatively longer period.

19. So far as my experience goes, I think ganja is generally used for smoking purposes. I must here note that I use the word smoking in a qualified sense for narcosis only. There are, however, occasions when people of small means use it as medicine in such skin diseases as scabies, etc. They boil ganja with a little of raw sulphur and camphor in mustard oil and apply this medicated oil over the parts affected. I must here note that medical science has still now very considerable doubt as to the effect of this drug when administered externally. Dr. Bruce, in his well-known *Materia Medica and Therapeutics* (page 375), says—"Positive knowledge on these points is wanting; *Cannabis indica* is never used externally." But I can say from my own experience that the medicated mustard oil, as described above, has completely cured scabies when acid boracic, and carbolic and sulphate of zinc failed.

Ganja has, however, other uses than those already mentioned. Assistant Surgeon Dr. A. C. Khastgir of Calcutta made a tolerably extensive trial of this drug in nervous and spasmodic diseases. He made his patients smoke ganja like the ordinary Indian smokers with what may be called marvellous success.

I am aware of no other use of charas than smoking. I believe that medicinal use of ganja is common to the people of lower class all over the province of Bengal.

20. Ganja is generally smoked by people of lower class. It is sometimes found to be indulged in by the middle class. But the instances are very rare, and by those only who get morally debased. The use of charas is, as a matter of fact, comparatively less. An attempt to give the exact proportion of the consumers of these drugs would be too risky, inasmuch as there are no Government statistics to warrant such figures, nor is there any possibility of other trustworthy source of information.

21. Of the three kinds of the ganja, flat, round and chur, round is the strongest and the flat and chur possess the same narcotic strength. The round ganja is in great request in Calcutta, 24-Parganas and Hughli, the flat in the Eastern and Northern Districts. I do not think that there is any very great difference in the taste of these

different varieties. I believe preference for smoking does not depend on the kind of the drug, but on the habit each man gets accustomed to. Accident alone, in my opinion, can explain the cause of one's getting used to any particular kind of ganja. The smoker of round would like to smoke only the round, and so forth.

22. Charas is manufactured in Nepal and Gorakhpur. The Nepalee charas being superior, is generally used by the consumers.

23. Bhang is never used as a smoke when the object in view is to get intoxicated; nor is it made a substitute for ganja unless the smokers are driven to extreme privations. But I know that pure bhang is smoked by asthmatic patients when the spasmodic fit is on. It is antispasmodic, and is generally a sure means of arresting the progress of the disease for the time being.

24. Bhang is generally used as a drink. In Bengal, I think, there is no section of the community in which this drink has obtained anything like a regular indulgence. Dyspeptic patients of all classes sometimes take to this drink as a stomachic with some benefit. There is, no doubt, no want of instances in which such drink is resorted to for the sake of pleasure alone; but the instances are rather casual.

In the North-Western Provinces and Oudh bhang drink is in much request, and it is perhaps very generally used by all sections of the people. The North-Western Provinces men eat bhang occasionally, but drink is their favourite. The different use of bhang, as set out in this question, is perhaps not confined to any particular class or classes.

25. The consumption of charas and bhang being comparatively rare, no statistics with any accuracy may be given. But with regard to ganja it may, I think, be said that the consumption is rather steady. What leads me to come to this conclusion is that the area of land under ganja cultivation and its annual production have ever since 1876 remained, on the average, stationary; the area is about 2,000 bighas, and production ranges between seven and nine thousand maunds a year.

26. I am unable to answer this question supporting it with exact facts and figures. But I may say from my knowledge that the number of habitual moderate consumers is the greatest; next comes the class of habitual excessive consumers, and then occasional moderate, and lastly occasional excessive consumers.

27. I believe the habitual moderate consumers mostly belong to the labouring class, and the habitual excessive smokers come from the sanyasis, musicians and debauchees. I think those that are given to one kind of intoxication may sometimes be induced, either for pleasure or for curiosity, to indulge in hemp-smoking. So no definite idea can be formed of the source that supplies the units of the occasional moderate consumers. As for the occasional excessive consumers, the number is, I think, so small that nothing definitely can be said as to what particular class they come from. The habitual moderate smokers resort to this drug in order to remove their fatigue and to refresh themselves after the hard work of the day. The sanyasis, musicians and other habitual excessive consumers, with a view to concentrate their thoughts to one particular thing, get themselves addicted to this habit. Mere satisfaction of fancies, I believe, leads the smokers of the two other classes to indulge in hemp-smoking.

28. The cost of a habitual moderate ganja smoker for the drug would vary from half to one anna, and that of a habitual excessive smoker from two to four annas a day.

29. The smokers of ganja invariably mix tobacco leaves with ganja. I should here specially note that I have gathered information about this fact from a lot of confirmed ganja smokers. The majority of them are unintelligent beings and do not know the how and why of such admixture. However, the conclusion I have come to, is that tobacco leaf does neither increase nor decrease the narcotic principle of the drug. I believe tobacco is smoked by about ninety per cent. of the natives of Bengal. It is a peculiarity of tobacco smoking that it always causes a temporary irritation of the air passage. But the smoking of pure ganja does not produce any such, and its narcotic effect is almost instantaneous; consequently there is every likelihood of there being very long and bold whiffs, thus making the indulgence a fatal one. That is why ganja is mixed with tobacco. This mixture makes the bold whiffs to some extent very difficult. I believe originally this admixture of tobacco leaf was introduced as a safeguard against any such accident. To explain the admixture briefly, it may be said that it serves the purpose of a safety-valve with the hemp smokers. I am not aware of dhatura being used as an admixture with ganja for ordinary smoking purposes.

Those who drink bhang for pleasure's sake use the following ingredients with it:—(1) seeds of cucumber; (2) black pepper; (3) aniseed; (4) poppy seeds.

To increase the active principle of the drug (bharg), people generally mix the following articles with it:—(1) stalks of betel leaves; (2) grass (durba roots); (3) rice (atab powder); (4) sugar; (5) pumpkin roots.

To make the drug sweet to the taste and to increase the flavour of the drink the following are added:—(1) milk; (2) sugar; (3) spices; (4) rose water.

30. Ganja is generally smoked by the lower class of people in company; but those that have some status in society indulge in it in solitude.

It is generally smoked by the male sex; but prostitutes of a very low order are sometimes found addicted to this drug. The smoking of ganja has no concern with any particular time of life.

It is not usual for children to consume any of these drugs.

31. The habit of smoking ganja, I believe, is very easily formed, and it is at the same time not very difficult to shake off.

It is the characteristic of all narcosis to develop into excess. Ganja being one of the intoxicants, there is no reason why the general law would not obtain in this case.

32. I am aware of no religious custom which makes the consumption of any of these drugs essential. In some parts of Bengal, people drink bhang on the Bijaya Dashami day; but this even is neither universal nor essential. It is generally temperate, and is not calculated to lead to the formation of the habit. Such drink is not regarded as injurious.

33. I think public opinion, either social or religious, is not in favour of the consumption of any of these drugs. On the contrary, the consumers are looked down upon by the society. The reason why they are held in such disrepute

lies, perhaps, in the fact that the consumers generally come from the lowest class of society and form the dregs of it.

I am not aware of people worshipping the hemp plant on any occasion.

34. I do not think that the habit of smoking ganja is such that consumers cannot shake it off. I have enquired of a number of persons who have been addicted to ganja smoking, and their unanimous testimony is that the habit may be broken off. I kept a notorious hemp smoker, after I had got these questions, in close custody for about nine hours, and it did not seem that he felt any very serious uncomfortableness at this privation. Jail reports of the newly admitted prisoners bear this fact out.

35. I think it is feasible to prohibit the use of all these drugs without creating any very serious discontent, though there might be some at the beginning. Our past experience shows that any political danger is, to say the least of it, an impossibility. The only case in which the suppression of any social custom or religious rites by any legislative enactment brought on political danger was that which caused the Sepoy Mutiny of 1857. But the history of India has other illustrations to hold out, which prove that there is no such apprehension. The suppression of the Thugs, the sati during the Viceroyalty of Lord William Bentinck, and the enforcement of the Consent Bill in the teeth of such universal opposition from every province of Bengal have not led to any disturbance. These were customs which affected the whole country very intimately. But the consumption of these drugs, which has obtained only among an infinitesimally small fraction of the population, and that of such a nature as are without both light and culture, cannot, if prohibited, bring on any sort of disturbance. Such a state of things is never expected from these loyal subjects. I don't think that the prohibition will tend to introduce illicit consumption—even if it does, it is sure not to endure long; I think the present consumers of these drugs may then get addicted to alcoholic drinks. The only means for such prohibition is legislative interference.

36. Yes, there is some reason.

These drugs are generally used by people belonging to low class, and they are looked upon as dregs of society. But nowadays persons who have some status in society, and who are reputed to be men of education and culture, are found to drink liquors without any censure from the general public, provided they remain within proper bounds. This opinion of the age induces certain persons to substitute alcohol for these drugs. Formerly Muhammadans, as a rule, and persons of other castes used to be excommunicated for the vice of drinking; but at present the Muhammadan and such other societies have learnt, seeing the tendency of the age, to overlook these vices and to indulge in them.

37. The effects of charas and ganja smoking are different. The effect of ganja smoking is, as Dr. C. J. Waring puts it, to produce increased arterial action and great exhilaration of spirits, remarkable increase of appetite, unequivocal aphrodisiac and great mental cheerfulness. But charas smoking brings on a sort of uncomfortable burning sensation in the eyes, idleness, drowsiness, and ultimately culminates in catalepsy.

38. Practically there is no difference.

39. I think that smoking of these drugs is less injurious than either eating or drinking them. The eating or drinking of ganja is so very rare a phenomenon that I have never come across a single case in my life. In smoking the active principle does not wholly act upon the system, a part of it being burnt; but in drinking and eating, it wholly assimilates with the blood.

40. The native school of medicine makes very extensive use of bhang or siddhi for internal use in such diseases as indigestion, diarrhoea, dysentery, etc. But I am aware of no disease in which ganja is used internally by the native school of medicine. My answer to question 19 gives the cases of the external use of ganja. I have no knowledge as to whether any of these drugs is used in the treatment of cattle disease.

41. (a) I have obtained the testimony of several hemp smokers, and it is evident from that that these drugs are neither food accessory nor digestive.

(b) It is said by the smokers that the smoking of these drugs alleviates fatigue. They also say that these drugs enable them to work hard patiently.

(c) I don't think that these drugs have any antimalarious properties.

The people belonging to labouring class use these drugs for the above purposes.

The effects, I speak of, have reference to the moderate habitual use of the drugs.

42. In my opinion the moderate use of ganja and bhang under certain circumstances is harmless, inasmuch as such use is prescribed at times by medical advisers.

43. Yes, they are inoffensive.

44. All the habitual moderate ganja smokers unanimously say that they feel extreme cheerfulness immediately after smoking the drug. The immediate effect of such smoking, as they say, is the forgetfulness of all surrounding circumstances. It produces in the smoker a sort of vanity which makes him feel himself to be in the most exalted position in the universe.

After the hard work of the day the habitual smoker would eagerly take this drug to refresh himself. In habitual smokers it does not produce regular intoxication but a little exhilaration of spirits. It allays hunger and increases appetite, as they say. Its effects last for three or four hours. It leaves the smoker without any after-effects, and he feels himself quite at ease without subsequent gratification.

45. There is such diversity of opinion regarding the effects of Indian hemp that it may be safely remarked that medical science up to date has not come to any decided conclusion. Different medical authorities have expressed diametrically opposite views about the effects of these drugs. Dr. Bruce (*Materia Medica and Therapeutics*, page 374), Dr. Waring (*Therapeutics*, page 139), and the writer of the "*Indian Medical Record*" ("*Indian Medical Record*", March 1, 1892) are not at one in speaking of the action and uses of the Indian hemp. In the face of these conflicting and contradictory opinions it is not safe to give one's opinion regarding its effects depending on the statement of any one of them; consequently I have thought it prudent to state its effects from my general experience. As far as I can understand, any very serious evil results, physical, mental or moral, are not likely to proceed from the moderate habitual use of ganja and bhang. In

some cases in the long run evil effects may follow. But the instances are not so numerous as are likely to affect society materially. In conclusion, I must say that ganja smokers of all descriptions are generally seen to have irascible temper.

46. The habitual excessive use of ganja, like all other intoxicants, is productive of all the evil effects, physical, mental or moral, as contemplated in question 45. An habitual excessive smoker of ganja generally becomes emaciated and loses activity and liveliness of spirits. Such use causes loss of appetite, as to be found in the cases of sanyasis and jogis. It does not directly bring on indigestion, but it renders no help for digestion. It generally subjects a man to get dysentery, bronchitis or asthma. An excessive smoker of ganja is generally found to possess a very furious temper and get morally debased. He indulges in these drugs only with a view to satisfy his evil propensities, and thus makes himself an object of hatred by the general public. Here it might be said that in the cases of sanyasis and jogis, no such evil effects, as described above, are manifest. This difference might be explained thus:—Sanyasis and jogis, who cut all connection with society and devote their lives entirely to the contemplation of the Divine Being, do not trouble themselves with evil thoughts regarding worldly affairs. They take to this drug solely with the object of bringing their thoughts to a focus. Such concentration of mind about an edifying and ennobling theme tends to keep the religious smokers, so to say, above the vicious atmosphere which envelops the amateur excessive smokers.

The informations I have gathered with regard to this point lead me to hold that insanity is one of the direct and natural consequences of excessive hemp smoking. Being no expert, and having never been to any lunatic asylum, I cannot say to which type or class of insanity, that, brought on by hemp smoking, falls. Without sufficient knowledge of medical science, and vast and varied experience of such cases of insanity, it would be too risky to make an attempt to answer the remaining part of this question.

47. I do not think that the habit of smoking ganja is transmitted by the father to the son. But there is no denying that it sometimes affects the character of the children of the consumers by the bad example they set.

48. I have on several occasions carefully observed the cases of habitual excessive smokers of ganja, and I have invariably found them in a very wretched state of health. Excessive smokers are generally found suffering from capillary bronchitis and dysentery. Their health gets completely shattered. If the theory of heredity has any truth in it, I am of opinion that a father with such poor health must transmit the poverty of it to his offspring. Though the children, therefore, of the excessive smokers may not directly inherit the smoking habit from their father, but, for all that, they get very much degenerated in both mind and body.

49. These drugs are by some persons smoked for aphrodisiac purposes. I am told that prostitutes of the lowest grade are addicted to the habit for such purposes.

As far as I can see through, the use of these drugs for aphrodisiac purposes is more injurious than ordinary smoking. The reasons are almost self-evident. The sexual appetite is abnormally increased, and gratification of passion at a time

when nature does not require it, brings on a sort of sexual debility which ultimately may end in complete impotency.

50. When the use is excessive, the consequences, as shown above, are more sure, rapid and vehement.

51. Habitual moderate consumers of ganja and bhang do not always turn out bad characters, so their proportion is not large.

I do not think that moderate use of these drugs tends to make the consumers inclined to criminal acts.

52. The case of excessive use of these drugs is, however, very different. A man under the influence of these drugs, when taken very excessively, as is the case with all other intoxicants, may perpetrate any crime, however horrible.

53. Yes. I am not aware of any such instance.

54. Yes; hardened and professional criminals use these drugs in excess to make themselves proof against all humane qualities.

55. Yes; criminals sometimes, in order to carry out their evil designs, induce their victims to smoke ganja to make them lose their consciousness.

I do not think that any of these drugs in an unadulterated state can bring on complete stupefaction. Dhatura and other narcotics are generally used for such purposes.

56. My answer to question 29 will explain the cause of admixture of tobacco leaf with ganja.

I do not possess any such information.

57. I have no knowledge as to the eating or drinking of ganja and charas.

58. On the whole the present system of excise administration is working well; but for all that I believe it may admit of a few improvements.

59. I beg to suggest the following as improvements upon the present system of excise administration :—

I.—At present the limit assigned by the excise laws for any person to possess ganja for his own use is 20 tolas. In my opinion it should be reduced to 5 tolas. I consider it expedient, for—

- (1) it will increase the Government revenue because the difference between the present limit and the one suggested will be excisable;
- (2) it will check smuggling to some extent. The present limit of 20 tolas enables a man to accumulate a large quantity in a short time, and so facilitates the ways of smuggling. But should the limit be narrowed, it would be difficult for a man to accumulate a quantity in the ganja season sufficient to give him an opportunity of illicitly trading in the drug.

II.—Searching with police. Under the present administration the assistant ganja supervisors detect smuggling cases with the help of the police. This, I think, retards the business, inasmuch as—

- (1) the police assistants cannot always be had in time;
- (2) the police are sometimes oppressive.

III.—Though it is not in the present excise law, yet the attention of Government has been drawn to the question of weighing ganja before it is stored by the cultivators in their own golas. I am afraid this will, if enforced, bring on the following disadvantages :—

- (1) There is no denying the fact that a considerable time will elapse between the weighing of the drug by the Government and its sale. It is very natural that the weight will get reduced in this long interval on account of atmospheric influences and the damages caused by rats and such other animals. But for this unavoidable loss of weight; provision may be made by making certain allowance for the above causes. But I am of opinion that such allowance will be inexpedient for the following reasons :— There is no knowing what will be the actual loss of weight, so the allowance made will inevitably be either more or less than the actual loss. Now if it be more, the Government will only afford the cultivators an opportunity for carrying on smuggling; but should it happen to be less, the innocent cultivators will be made liable to punishment without any offence on their part. I think I will not be supposed to be dreaming if I beg to say that the cultivators of hemp may, after they have been made to suffer bitterly for no offence, be forced to give up the cultivation altogether. The temptation of ganja cultivation is not such that the cultivators will persuade themselves to carry it on under all disadvantages and hardships. The net profit arising out of the cultivation of other crops, such as potatoes, sugarcane, turmeric, chilli, etc., is no way less than that yielded by ganja.
- (2) It means also additional expenditure on the part of Government; for there will be necessity of employing a larger number of officers than the present staff to carry out this scheme. The present staff will not be sufficient to weigh ganja stored in the houses of several cultivators.

IV.—The attention of the Government has also been drawn to the question of enforcing the storing of ganja in Government depôts. I think, this, if enforced, will subject the cultivators to two inconveniences, viz. :—

- (1) The cultivators will lose much time in travelling from their homes to the Government golas simply to show the article to the intending purchasers every time they turn up; and it will also make the purchasers lose much time. There are some cultivators who, as soon as the ganja crop is over, begin to earn their livelihood as day labourers. For such persons this journey, which may sometimes prove quite fruitless, means starvation of the impecunious mouths depending upon them.
- (2) The poor cultivators will be quite unnecessarily made to incur expenses to convey the drug from the field to the Government depôts at a distance of ten or twelve miles.

60. The cultivation, in my opinion, is sufficiently controlled.

61. Charas is not produced in the province I belong to.

62. I don't see any necessity for such controlment.

Yes, such check is feasible; but it is, as far as I understand, not necessary.

63. No.

64. The only suggestion which occurs to me regarding this question is that it would be more safe and convenient to export ganja to distant places by packing it in small boxes instead of sending it in bundles wrapped up with gunny cloth as it is done at present. The suggested change would save the drug from deterioration by atmospheric influence and waste caused in transporting the drug in the way now followed.

65. I am not acquainted with minute particulars regarding taxation, such as to enable me to answer this question.

66. Yes, there should be different rates of taxation. It should be regulated according to

the quantity of the essential part which each kind of ganja possesses. The large, small, and absence of twigs in each kind flat—round and chur—should form the basis of this difference. The twigs have no narcotic power, hence they are rejected by the smokers, but they unnecessarily add to the weight of ganja.

67. I have no objection.

68. Yes, there are such shops for sale of ganja in several districts of Bengal. These shops are calculated to facilitate the sale of the drugs, but such a shop is looked upon as a rendezvous of low class people and persons of ill repute, who always prove offensive to their neighbours.

69. No. The application of a person belonging to the locality where there is likelihood of sale of such a drug is considered sufficient for the grant of a license for such a shop. Public opinion should by all means be consulted for the opening of these shops.

70. I am not aware of any such facts. As far as I know, duty is really paid for such drugs used, and I do not know of any general use of untaxed drugs.

197. Evidence of Mr. H. M. WEATHERALL, Manager, Nawab's Estate, Tippera.

1. I am a retired police officer. Served Government for 30 years in various capacities, 20 of which as District Superintendent of Police in Bengal, Behar and Eastern Bengal, and the last 16 years as a Zamindari Manager of large estates in Tippera belonging to Nawab Ahsan Ullah Bahadur, C.I.E.

3. The hemp plant grows spontaneously everywhere, abundantly in Eastern Bengal. It is part of the duty of the police officers to destroy the plant wherever seen, and to prosecute offenders who grow the plant for use as a drug.

4. The dry leaves are known as siddhi, bhang, subjee, pathi, ganja and chur. Ganja is the dried flowering tops; they all refer to the same plant.

5. No special conditions of soil or climate are necessary; it grows anywhere abundantly.

6. Scattered usually, but dense when purposely sown.

7. Not in the district of Tippera, but in Independent Tippera.

8. Cannot say.

9. There is no particular method.

10. Same classes as ordinary cultivators.

11. Yes.

12. I have not seen any.

13. Answered in Chapter II, paragraph 3.

14 and 15. Ganja (A) and (B) are both used for smoking, (B) is eaten in the form of sweetmeat called majum, and (C) is ground in a pestle and mortar and mixed with milk and sugar for drink.

16. Bhang and charas are prepared generally by the people in their houses; both ganja and charas can be prepared from the wild plant.

17. No particular class.

18. Ganja does not deteriorate by keeping but charas and bhang do.

19. Yes, ganja and charas are used only for smoking; both are used in the same huka.

20. Religious medicants, such as jogis, bairagis, and other low castes, chiefly Hindus, smoke both ganja and charas; the proportion is about two of ganja and one of charas.

21. Ganja is ganja; whether it is round or flat, it is all the same to the smoker.

22. Both are equally welcome, so long as it is easily got.

23. Bhang is seldom used for smoking, and only when ganja is not procurable.

24. All classes. It is not forbidden, but enjoined by the Shastras. Siva himself was a liberal patron of hemp drugs in all its varieties, and his followers keep up the dignity of their great master by calling it "Siva prasad."

25. I cannot say.

26. (a) 7 annas.

(b) 4 annas.

(c) 3 annas.

(d) 2 annas.

27. Middle and lower classes of Hindus. Muhammadans are in the minority.

28. (a) Half anna worth.

(b) Unlimited.

29. I have seen a little tobacco leaf used with ganja, but no dhatura; the object is to prolong the smoke. Bhang massala is composed of aniseed, cardamom, and ground with bhang, to which a little salt is added for drink.

30. In solitude one-fourth, in company three-fourths; it is not confined to the male sex; prosti-

tutes also indulge in it. I have not seen children consume any of these drugs.

31. The habit is easily acquired, difficult to break off, and has a tendency to excess.

32. "Three Nath Mela," where one pice pan and supari, one pice ganja, and one pice mustard oil are offered as a religious ceremony; and on every festival when Siva is worshipped where the banian and peepul trees are growing together (*Ficus indica*, *Ficus religiosa*) this custom is essential, but temperate. Their occasional smoking must lead to the formation of the habit.

33. Yes, there is a strong public opinion, both social and religious, in favour of the practice. The hemp plant is not worshipped in any ceremony, but it is held in great veneration by jogis, bairagis, and other religious mendicants.

34. It would certainly be serious to a very large class of consumers.

35. It would be feasible to prohibit, but difficult to enforce. An army of excise men could not prevent the illicit growth and consumption. The prohibition would not drive Hindu devotees to alcoholic stimulant; to others it would.

36. No.

37. There is no difference between charas and ganja smoking, except that the latter is milder.

38 and 39. I am unable to answer these questions; only those, who have tried it, can.

40. Yes, bhang is often prescribed by kabirajes, but I do not think ganja or charas is. I have heard that ganja is applied to extract worms in foot-sore disease of cattle.

41. The moderate use of ganja, charas and bhang is not harmful. People say that it is digestive, gives staying-power, and keeps off fever.

42. The moderate use of these drugs is harmless, but it is very difficult to draw the line where the harm begins. It is said that one chillum of ganja is happiness, two heavenly, three intoxicating, and the fourth madness. Another saying is one chillum is so-and-so, two is refreshing, three is prime minister, and the fourth is kingly.

43. Yes.

44. I am unable to answer these questions.

45. I have already answered some of these questions.

46. I have already answered some of these questions.

47 and 48. No.

49. Yes, but it does not tend to produce impotence.

50. Excessive use must eventually ruin the constitution.

51. Speaking as an old police officer, I have invariably found thieves and bad characters addicted to smoking ganja; it is said to give them courage to undertake a job and cunning to escape capture.

52. Excessive use acts just the reverse of the last answer—produces drowsiness and sleep, and unconsciousness follows as a general rule.

53. I know it tends to lunacy. I have seen several instances among criminal offenders.

54. Yes, see paragraph 51.

55. Hemp drugs do not produce immediate stupefaction; it can only be done with dhatura.

56. I have never seen hemp drugs mixed with dhatura, but I have met cases in which dhatura is mixed with country spirits.

57. Already answered in paragraph 24.

58. I am not acquainted with the present system of excise administration; there must be many changes since I left the service sixteen years ago.

61. Yes.

62. Answered in paragraph 35.

63. I do not think there could be any improvement; there already exist too many restrictions.

64. No.

65. I have never heard objections to the ganja tax, but there is a great outcry against the tax on country spirits.

66. One uniform rate for all kinds of ganja would be preferable.

67. No.

68. There are licensed shops for the sale of ganja, but nobody is allowed to sit there or smoke on the premises.

69. Mufassal ganja shops are fixed in public bazars, where it is not necessary to consult the wishes of the people.

70. It can only be smuggled from Hill Tippera, but there are a good many safeguards against it.

Before concluding I would add that even if the cultivation of opium is restricted, ganja will rule the country.

198. Evidence of BABU NITYANANDA DASS, Assistant Temple Manager, Puri.

Oral evidence.

I am Assistant Manager of the Puri Temple. I was appointed to this office nine months ago on behalf of the Puri Rani. I am a native of Puri, and have lived here practically all my life. I have resided for the most part in the town of Puri; but I go into the interior sometimes to visit my estates. I was also Tahsildar of Khurda for some time before 1883, and I knew that subdivision then.

There are many servants of different classes

attached to the temple of Jagannath at Puri. There are thirty-six classes of servants. The principal are the *suats* or cooks; the *pandas* or pilgrim-agents, who also offer the *bhoj* or food to the god; the *patribara* and *guribara*, who offer tulsi and water; the *pariharis* or watchmen the *daitas*, who carry the idol to and from the *rath* and to bathe, and are the most ancient of the temple servants; the *mekap*, who have the charge of the clothes, ornaments, etc; and the *poshupalak*, who decorate the idol. All these different classes of servants take hemp. There are very few indi-

viduals (if any) in any of these classes who do not take the drug. Their use of it is rarely excessive. It is moderate. They generally take hemp as a beverage. They do not smoke. They say that the drink cools the belly, opens the bowels and assists in digesting food. This is true. A man who takes bhang can digest sweetmeats worth two rupees, while we could not digest four annas' worth. These men are also robust and able-bodied. Unless they were so, they could not do the hard work that falls to them.

These temple servants are very numerous. There are about seven hundred houses of *suars* or cooks. That would give, say, fifteen hundred men. They have to cook both for those who are employed in the temple and also for bairagis, widows, etc., who are living in Puri, dependent on the temple and either paying for their food or receiving it as charity. Of the *poshupalaks* there will be about one hundred houses, and about one hundred of *pandas*. Of the *pariharis* or watchmen there are a thousand houses at least. All the servants or *sewaks* probably amount to three thousand. Then these people have gomastas, who go all over the country to bring in pilgrims. There are about three thousand such gomastas. I know one man, Harihar Guru, chief of the *pariharis*, who has five hundred gomastas of his own. Two-thirds of these gomastas are generally absent from Puri on duty. The rest are present. They all take bhang. Only *pandas*, who are very poor and cannot afford a gomasta, go out as pilgrim recruiters themselves. All these temple servants get part of the *bhoj* from the temple, and also receive presents from the pilgrims.

These men rarely smoke; only the spoiled men among them smoke. They, for the most part, drink hemp. They use Gurjat ganja. This ganja is the flower mixed with the leaves or patti or bhang. These men often use Bengal siddhi when it is available. But they do not like it so well as Gurjat ganja, because they say it is not so effective. The Gurjat ganja is stronger, more agreeable to these people from their habits, and said to be more cooling than Bengal siddhi. These men do not take the Rajshahi ganja to drink at all unless they are obliged to do so. If they can get nothing else they take it. They took it when Gurjat ganja was prohibited. But they said it was too strong. They say it heats the body too much and causes dysentery and the passing of blood. So far as I remember, there was no Bengal siddhi available then.

Sometimes the leaf of the Gurjat ganja, which falls or is broken off from the plant, is used alone as bhang by those who only take a little bhang for pleasure. But those who have labour to do, mix the ganja flowers up in their bhang with the leaves. The Gurjat siddhi or leaves without the flowers is very weak.

The population of the town of Puri is by the census 25,000. Among this population there is a large proportion of males. About one-half or seven-sixteenths may be deducted for women and children. The men are about twelve thousand five hundred. Of these, perhaps five thousand take no intoxicant regularly; but the remainder take opium, ganja or siddhi. I think that the majority take siddhi. There is almost no ganja-smoking among the temple servants; but bairagis and common people do smoke. For smoking, Rajshahi ganja is preferred. It is only, I believe, where it cannot be obtained that Gurjat ganja is smoked. The Raj-

shahi ganja is far stronger. It is said that to drink it is very injurious, because it is so strong. I do not know that this is true if it is smoked. I have heard that the people who are accustomed to smoke Gurjat ganja say it is better; but I know that the smoker of the Rajshahi stuff prefers that, and any man who has smoked the Rajshahi ganja prefers it. That is because it is stronger, I suppose.

Gurjat siddhi and Gurjat ganja are not imported separately. They are brought in, as a rule, on the one plant in bundles. If the leaves break off they are brought in separately, but under the same license as the ganja. I understand that the prohibition against Gurjat ganja has been withdrawn and that it can be imported by license. When the ganja flowers break off from the leaves, the latter are brought in also. They are very rarely drunk apart from the flowers. Certainly none of the temple servants would use the leaves without the flowers, because they want their bhang to be strong and intoxicating. What is known as Gurjat ganja is used in the town simply as siddhi or bhang. It is stronger than the Rajshahi siddhi, which is only leaves; but it is weaker than the Rajshahi ganja.

I do not think that Gurjat ganja is much used in the interior of the district for smoking, not so much as is the case with Rajshahi ganja. The latter is preferred where it can be got. The lower orders drink toddy when they drink, and the higher classes siddhi. I have myself seen siddhi or Gurjat ganja drunk by banyas, Brahmans, Telis, cultivators, etc. This was at a festival. It is not, however, the custom for cultivators to drink siddhi or ganja. If they take hemp, they usually smoke it. Brahmans, on the other hand, drink it as a rule. Similarly bairagis smoke, but *pandas*, etc., usually drink hemp. The people not only use hemp for stimulant, but also because they generally believe that it is good for elephantiasis, which is common here, and for other diseases brought on by this climate.

There is a great deal of smuggling of Gurjat ganja. That is, I believe, the principal source of supply. The smugglers are servants and consumers principally. The servants bring it for their masters to use or sell. There are about fifty thousand pilgrims at the Car festival in an ordinary year, and not less than fifty thousand more throughout the year. I know nothing of their habits while here. I cannot say how many use hemp. They may give ganja to the temple servants. But no ganja is presented to the temple. Ganja is only given in Siva temples.

If the Gurjat ganja were stopped, there would be discontent. There were complaints when it was formerly stopped. I heard that some six people died from not getting Gurjat ganja and having to drink Rajshahi ganja. They died within a year or two. They had dysentery and such diseases. They were shopkeepers and people of that class, not temple servants. I do not think that Bengal siddhi would satisfy people accustomed to drink Gurjat ganja. But if it were available, there would be less discontent. I am doubtful, however, if it would be so beneficial to health as Gurjat ganja. I think that Gurjat ganja is good for the health. I have taken it myself on the doctor's recommendation and also in social feasts, and have found it beneficial. I should be against stopping Gurjat ganja too suddenly. We cannot stop smuggling without harsh measures. Harsh measures should be avoided.

199. *Evidence of BABU SASHI BHUSAN ROY, Chairman, Satkhira Municipality, District Khulna.*

20. Coolies and palki-bearers use ganja, some in moderation, and some in excess. Saivas also use ganja.

Charas is not in use here. Bhang is used in moderation by some in higher classes.

28. Six pies worth ganja per diem may be regarded as moderate consumption.

29. Tobacco is used as admixture with the hemp drug, the object being to soften the narcotic effect of it. No other noxious drugs (such as dhatura, etc.) are consumed knowingly with hemp drugs.

31. Moderate use generally tends to develop into the excessive use.

32. Lower class people generally use ganja in the time of marriage ceremonies. Higher class people use bhang in the night of the Bijaya Dasami, *i.e.*, the day following the Durga Puja.

35. The use of hemp drugs should not be prohibited. Labouring classes and lower classes in damp districts use it more for health than for pleasure. If its use be prevented, it would be injurious to their health.

In my humble opinion the ganja trade should not be prevented, as many lower class people use it. If the use be prevented, these will resort to drinking, which will bring ruin to themselves and their family.

41. Coolies and palki-bearers use ganja only to enable them to labour hard. Bhang is used more for medicinal purposes. Ganja and bhang make men jolly.

In damp climates ganja in moderate use may protect from malarious fever; coolies and palki-bearers can labour hard if they use in moderation. But use in excess, instead of doing any good, injures health. Bhang in moderate use improves digestion, and in damp climate prevents malaria.

55. No such other drugs are administered with any preparation of hemp.

59. Duty on ganja is very heavy. The shopkeepers who purchase and pay duty for the whole year suffer loss for the unconsumed amount of ganja in the end of each year, which is burnt by Government.

200. *Evidence of BABU AGHORE NATH BANERJI,* Vice-Chairman, Serampore Municipality, District Hughli.*

1. Eyesight of ganja and charas smoking and bhang drinking.

Informations from ganja and charas smokers and bhang drinkers.

Personal experience.

2. May be accepted.

Ganja is locally known by the name of Bara Tamak and Ceyeeah.

Charas is locally known as charas.

Bhang is locally known as siddhi or bhang.

14. Not manufactured in the Hughli district.

16. Never seen any one preparing bhang in his house.

18. Ganja, charas and bhang stand good for a year. They lose their qualities and become useless after one year. These informations I have derived from the ganja and charas smokers and bhang drinkers. The resinous matter in each of the three drugs gets dried up after a year, and consequently they lose their narcotic power owing to the loss of the resinous matter which is the active principle.

19. Ganja and charas are used for smoking purposes only. The former sometimes, when boiled with cocoanut oil, is used domestically in Bengal to cure itches and other allied skin affections. Extracts and tinctures of *Cannabis indica* are made pharmaceutically and imported from Europe for the cure of certain diseases.

20. Lower class people above 30 years of age smoke ganja generally. Among females some prostitutes smoke ganja, and few middle class men and a very few rich men smoke ganja. Charas is smoked by *very few* young men of the middle class within teens. Proportion of ganja

smokers among lower and middle class men, 1 per cent.; of charas *very much* less; localities cannot be particularized.

21. Round ganja is preferred in our district, but I have heard that flat ganja is preferred by up-country people.

22. I have heard that Nepalee charas is chiefly used here, and that it is imported from up-countries.

23. Bhang is never used for smoking in the district.

24. Up-country people of all classes, not excepting those even of Mewar, Marwar, etc., generally, with few exceptions, drink bhang. Sanyasis, *i.e.*, ascetics, or in other words, religious mendicants generally use bhang; people of Bengal proper use it either in its liquid or powdered form as a cure against indigestion and bowel complaints.

25. On the decrease; reasons—

(a) That the narcotic effects of these drugs on persons using them have ended invariably in untimely and premature deaths resulting from insanity, dysentery and complaints of a like nature, a fact that has operated in no inconsiderable degree on the rising generation to abandon its use in a great measure.

(b) Intelligent men hate ganja and charas smokers by calling them "ganja-khor" or "charas-khor," and many people, in order to avoid being called as such, do not get inclined to use them; or, if they have been using them, they either do so very privately or discontinue them altogether.

The drinking of bhang is neither on the decrease or increase; those using it find no serious cause to abandon the practice.

* Was invited to attend at a sitting of the Commission for oral examination, but failed to appear.

Ganja.	Charas.	Bhang.
26. (a) 80 per cent.	90 per cent.	97 per cent.
(b) 16 per cent.	7 per cent.	1 per cent.
(c) 3 per cent.	2 per cent.	1 per cent.
(d) 1 per cent.	1 per cent.	1 per cent.

27. Habits of life or circumstances which mainly lead to the practice of ganja, charas and bhang.

Ganja.—(a) Daily working habits and especially working under the sun or cold make the up-country people and lower classes of natives of Bengal smoke ganja and charas habitually and moderately.

(b) Sanyasis become habitual excessive smokers of ganja in order to concentrate their mind and fix their attention to devotional purposes, and drive away all cares and anxieties and to abstain from passions and appetites; and to guard against the inclemencies of the weather, as they are in the habit of living in exposed places. Few other people than the sanyasis become habitual excessive smokers merely for enjoyment's sake to drive away all worldly anxieties.

(c) A few higher and middle class Bengalis become occasional moderate smokers for temporary pleasures and observance of certain religious performances.

(d) The same may hold good in regard to lower class of people, but their number is considerably large.

Charas.—(a) A few higher and middle classes of people of Lower Bengal and North-Western Provinces are habitual moderate consumers of charas for the mere sake of pleasure, as they technically term it.

(b) I have heard that a *very few* lower classes of people become occasional excessive consumers of charas, but I have no experience of their number.

Classes of people.

Ganja and Charas.	Bhang.
(a) Lower class people and few middle class men.	(a) Lower class people, i. e.—Hindustanis, Mewars, Marwaris, sanyasis.
(b) Lower class people.	
(c) Ditto.	
(d) Ditto.	

28. Ganja.	Charas.	Bhang.
(a) 1 Pice	1 Pice	1 Pice.
(b) 4 Pice, 8 Pice for Sanyasis.	2 Pice	2 Pice.

29. Ganja admixture ordinary.	Charas admixture.	Bhang admixture.
1. Tobacco leaves.	Goorook	coriander, mauri
2. Guruk tamak	tamak.	(anise), poppy seeds, rose flower buds, cucumber seeds.

Ingredients exceptionally mixed—1. Sugar. 2. Milk. 3. Dhatura seeds.

Objects.—(1) To increase the narcotic power. (2) To decrease pungency. (3) To sweeten and give flavour and make palatable. (4) To remove constipation and flatulency.

Bhang massala.—(1) coriander, (2) mauri (anise), (3) poppy seeds, (4) rose flower buds, (5) cucumber seeds.

30. Each man consumes about a pice or two of ganja or charas or bhang in solitude daily; he consumes more than two pice of ganja or charas when in company. The rule for bhang is the same either in solitude or in company.

Male sex usually smoke ganja or charas after the age of 30. Few prostitutes smoke them; up-country people both young and old drink bhang, children rarely.

31. (a) Yes.

(b) It is not difficult to break off.

(c) Yes.

32. (b) No.

(c) Temperate.

(d) No.

33. Notion for ganja-smoking—bad. Meanness and a certain amount of moral degradation are attached to the habit of smoking ganja and charas; no bad repute is attached to siddhi. No evil effects.

34. No. If a habitual ganja or charas smoker be denied the use of these drugs, he may feel little physical uneasiness for a certain number of days, then it ceases.

35. I think it quite feasible to abolish or prohibit the use of ganja and charas, but not siddhi or bhang. There is little chance of ganja and charas being illicitly consumed. The people do not know how these drugs are manufactured. Prohibition of the use of ganja and charas would create slight discontent among the ganja and charas smokers, and that for a time only; neither it would create any political danger. But the prohibition of bhang would assuredly create general and widespread discontent among all classes of the people, because the drug is highly valuable in connection with the preparation of some highly useful medicines of the Indian school; besides, the moderate use of the drug is rather wholesome than injurious. Prohibition of these drugs would not, I believe, lead to the use of alcohol.

37. Effects nearly the same; those of charas smoking being milder than those of ganja smoking.

40. Extracts and tinctures of *Cannabis indica* are now and then prescribed for its medicinal qualities by native doctors. Ganja boiled with oil is used for the cure of itches and other allied skin affections.

Powdered siddhi with other ingredients are often used by native kabirajes for the cure of many diseases of the digestive tract and many nervous disorders.

41. The moderate smoking of ganja and charas increases, no doubt, appetite and is digestive to some extent. I admit that they act beneficially in this wise, but act injuriously in many ways.

First.—It brings on bronchitis and some other chest diseases.

Second.—It blunts the memory, produces giddiness of the brain and makes temper

irritable. Moderate use brings on in many cases excessive use, and thus it makes the fruitful cause of insanity so notoriously known to every medical man. It is the cause of almost all cases of insanity. I have seen many people have become mad by the excessive smoking of ganja, but as charas-smokers are only few, so insanity from charas-smoking I have never seen.

I admit that moderate use of ganja and charas gives staying power under severe exertion and exposure, and to alleviate fatigue; but these effects last for some time after the smoking. After smoking ganja or charas the smoker feels little easiness of mind and body from his fatigue, exposure or exertions, but that lasts not long, stays a few hours and goes off leaving a reaction which is very sedative to the system. So taking the good and bad qualities of ganja and charas smoking into consideration, I am of opinion that the people of our country will be highly benefited if Government be graciously inclined to stop altogether the sale of ganja and charas, for our people can well comfortably live without them. As for the moderate use of siddhi, I am of opinion that this substance, so largely used by our people, is very useful and beneficial to the health either as a food or medicine, so largely prescribed by the native kabirajes. There shall, I think, be a general murmur and dissatisfaction of the people who use it if the sale of this drug is stopped altogether.

The above answer includes my answer to questions 48 and 50. I have treated many cases of ganja-smokers attacked with fever. I met with considerable difficulty in curing them with medicines. Whenever I have administered medicines to check their fevers, they make no action, but rather aggravate the sufferings of the patient; consequently I was obliged to stop all medicines, and

cured their fevers only with the application of ice to their heads and cooling drinks.

42. Not altogether harmless. It has some injurious qualities which I have explained in my other answers.

43. Yes.

44. Drowsiness (*i.e.*, sedative action). Temporarily refreshing. Yes; it increases hunger. Yes; lasts for a few hours. Little depression of spirits. Longing and uneasiness for a few hours.

45. (a) Slight.

(b) No.

(c) No.

(d), (e), (f) Yes.

Yes, may be temporary if taken care of and treated properly, and the use stopped as soon as signs of insanity are manifested; if continued still insanity becomes permanent. Insanes do not confess.

46. See answer to 41.

47. Not hereditary, but incurred; does not affect the children.

49. I have heard that sanyasis practise ganja-smoking not only to curb their sexual appetite but for other purposes. It is not used by prostitutes. The excessive use of ganja has produced many cases of impotence.

50. See answers to 41 and 49.

53. No (very rare in case of ganja-smokers only). I do not know of any case.

56. I have heard some excessive ganja-smokers finding no intoxication with ganja were observed to mix dhatura leaves with ganja and smoked them.

68. In our town (Serampore) some shops are licensed to sell ganja and siddhi, but not charas. In Calcutta there are shops licensed for the sale both of ganja and charas.

201. Evidence of BABU KHETRA MOHAN BASU, Municipal Vice-Chairman, Puri.

Oral evidence.

I am a pensioned Government servant. I am Vice-Chairman of the Puri Municipality, and also Honorary Magistrate and member of the Local and District Boards. I have been fifty years in this district. I have great knowledge of the habits of the people of this district. In the town of Puri, the *Pandas* and *Sewaks*, as a rule, take bhang. They rarely smoke. They take bhang for appetite and on account of the labour they have in connection with the temple. They have very heavy labour in cooking for all the people who live on the temple cooking: the bairagis, widows of Bengal, and others who live on the cooking and pay for their food. They have also very hard work in conducting pushing crowds from idol to idol. For bhang they use the siddhi that comes from Bengal, but they also use Gurjat ganja. They use that more than siddhi. When they could not get it they sometimes use the Rajshahi ganja, but they prefer the Gurjat ganja. They think it more healthy; but the real reason why they use it more is that they get it more easily. They get it from the pilgrims from Gurjat States and also from the shops here. They consume it twice a day—in the morning and in the evening. They do not get the bhang or siddhi from distant places much, but from the

Gurjat States. Both siddhi and ganja are imported from the Gurjat States. The Gurjat ganja is quite different from the siddhi, which is only the leaf. The Gurjat ganja differs in appearance from the Bengal siddhi; but I cannot say as to their effects. I do not know.

The use by the servants of the temple is generally moderate. The results, so far as I know, are not bad in any respect. Other people not only take bhang, but also smoke. The labourers and bairagis also smoke. They smoke Rajshahi ganja, not Gurjat. The Gurjat stuff is not smoked in the town. It is smoked in the interior of the district. I have heard this, and I have also seen near the Chilka Lake. I understand that this is because they cannot get the Rajshahi ganja. I understand that people prefer to smoke the Rajshahi ganja. I understand that they think it better to smoke, better for the constitution, better for the appetite. I cannot say what would be the daily allowance for a moderate consumer. I have seen smoking, but never carefully watched smokers. I have talked over the matter with them. I have seen more bhang-drinking in Puri, more ganja-smoking in Cuttack, more opium in Balasore. They say these differences are due to climate.

I know that there is a great deal of smuggling.

I remember a great deal of ganja being brought in by night and buried in the sand for the *Pandas*, who went to take it when they required. Information was laid, and seizures were made. It is Gurjat ganja that is smuggled. The Gurjat pilgrims bring it to the *Pandas*. I base this on cases I have seen of pilgrims being convicted. They give it to the *Pandas* and temple servants

and also sell it to them. There is also much smuggling by local people for their own consumption. I know this from my old experience when I was a Saristadar, and also from my experience as Honorary Magistrate. I cannot tell how much of the smuggling comes from Madras side and how much from our States. The ganja is the same in both cases.

202. Evidence of the REV. PREM CHAND, Missionary, B. M. S., Gaya.

1. My work lies amongst the masses in the town as well as in the district, and I have had many opportunities of observing the baneful effects of the hemp poison on those who take to them.

2. I think these definitions will do for this province. Bhang, charas, and ganja are terms commonly known in these parts. I should, however, suggest that majun, vulgarly called majum, should be added to this list. It is made of bhang or charas, with sugar, flour and milk in small cakes of a light yellow colour and largely sold.

3. Muzaffarpur, Bhagalpur, Purneah, and Rajshahi districts.

I have seen it grow in the northern part of the Bhagalpur district in abundance.

4. Bhang, bhung, thundhai, sabzi, patti, siddhi, etc. The term "gorak ganja" is made use of by the sadhus for the wild hemp. They all refer to the same plant—*Cannabis indica*.

5. I have no means to ascertain this; but as far as it has come under my observation, it is indigenous in Tirhut and the western and northern parts of Bengal proper, and in the northern part of Behar. It evidently needs rich alluvial soil, moderately moist.

7. (a) No.

(b) No.

(c) Yes, in the northern parts of this province, but to what extent I have no means to find out.

16. (a), (b), (c) Yes.

18.	Number of shops in town.	Number of shops in the district.	Quantity sold last year.	Rate at which sold.
			Mds.	
Ganja .	11	60	93	Rs16 per seer in town; Rs20 per seer in the district.
Bhang .	6	17	186	Rs1 per seer in town; Rs1-8 per seer in the district.

Besides two shops for selling majun, the shopkeepers paying a license fee of Rs48 annually, and turning out as much of this stuff as they please without any control whatever.

19. Ganja and charas are largely used for smoking. Very few excessive consumers chew it.

20. Ganja is smoked by almost all classes of Hindus, very seldom by Muhammadans. The sadhus are much addicted to it as well as charas, which is not in much favour with the common people. It is not sold in Gaya, as there are no consumers to be found here. About 15 per cent. of the population in Gaya uses ganja.

21. As far as I know, ganja, flat, round or chur, are distinctions made by Government. They are offered for sale by the shopkeepers as one

commodity—ganja—and are bought as such by the consumers.

22. Charas is not sold in Gaya.

23. No.

24. Almost all classes of Hindus take bhang. I do not think I shall be very wide of the mark when I say that 60 per cent. of the population of Behar uses it. The percentage would be somewhat higher in Baidyanath and Gaya.

25. The use of ganja, charas and bhang is decidedly increasing—

1st—On account of temptations placed in the way of the people, and facilities afforded them in obtaining it by the opening of shops in the chief market places and *mêlas* all over Behar. There are three shops kept within 15 yards of each other in the *chauk* or principal bazar in Gaya, and two of these shops are alongside of those in which vegetables are sold.

2nd—The cheapness of the drugs is a very strong incentive to their increase in consumption.

3rd—The Government officers somehow or other deem it wise to put forth strenuous efforts to push on the trade.

26.	Bhang.	Ganja.	Charas.
(a)	45 per cent.	30 per cent.	30 per cent.
(b)	35 do.	68 do.	68 do.
(c)	15 do.	Very few	Very few.
(d)	5 do.	Hardly any.	Hardly any.

There are very few strictly moderate consumers amongst those who take ganja or bhang.

27. The consumers belong to almost all classes, chiefly amongst the Hindus. Young people learn it in company with confirmed consumers. Debauchery often leads to it.

28.	BHANG.		GANJA.	
	Quantity.	Cost.	Quantity.	Cost.
(a)	$\frac{1}{2}$ ounce	0-0-1 $\frac{1}{2}$	$\frac{1}{2}$ dram	0-0-3
(b)	2 ounces	0-1-0	$\frac{1}{2}$ ounce	0-2-0

I have heard of people taking four ounces of bhang and half an ounce of ganja at a time; but these must be very exceptional cases.

29. Pepper, aniseed, cardamoms, milk and sugar are mixed with bhang generally, and they are called bhang massala. With ganja tobacco leaves, and with charas tobacco ordinarily prepared with molasses is used. As far as I know dhatura is not ordinarily used. Some sadhus in taking their *panch ratna* (or five precious things) make use of charas, ganja, dhatura, sankhya, and one more ingredient, probably opium.

30. People generally smoke ganja in company with two or three others; bhang with their families. I have seen men and women take bhang and smoke ganja. Children take bhang generally with the inmates of their house; some boys even smoke ganja. At the time of the Sivratra and the Holi festivals the Hindus induce, if not force, their children, specially boys, to take bhang.

31. I think so.

It is not only difficult, but, as far as I have seen, next to impossible to give up the evil habit, when the consumers meet with shops at almost every turn of the road where these poisonous articles are exposed for sale. I have observed a very strong tendency in many to go to excess in the consumption of these drugs.

32. At the time of the Sivratri and Holi festivals, 90 per cent. of the Hindus in many parts of India take bhang for several days. This undoubtedly in some instances leads to its use afterwards. The use of bhang is not in any way essential for the observance of these festivals.

33. The general public opinion is against the use of these drugs. Many educated people consider it a great evil, which ought to be classed with infanticide, human sacrifices, Sati, and the atrocities committed at the Charak festival which Hinduism had the honour to permit, inculcate and practise, but for the intervention of the strong hand of the British Government. Some Hindus who are slaves to the use of these drugs might defend it on religious grounds, but Hinduism based on bhang and ganja is a social evil which should not be tolerated by any right-thinking person as well as the Government.

I have not seen or heard of the worship of the hemp plant.

34. It would be a privation to the consumers if the drugs are prohibited; but it is not likely to be a serious one. When some of the habitual consumers are put in jail for the commission of some crime, they do not get these intoxicants there, and they generally do well and gain flesh and health.

35. It would be quite feasible, and is most desirable to prohibit the use of these drugs, except when required medicinally on the prescription of a duly qualified medical practitioner. There will be some discontent amongst the consumers, but no political danger whatever is apprehended, as the Muhammadans, as a rule, are against these intoxicants, and several sects amongst the Hindus and many educated people look down upon it with horror. In some instances people may take to other intoxicants, but not as a rule.

36. I do not think so.

37. I have not observed any great difference between the effects of ganja and charas on the consumer. It much depends on the quantity consumed.

38. No; they are one and the same thing, and are not sold separately by the vendors of these drugs.

39. They are all most pernicious in their effect on the consumers.

Bhang is little milder in its effects than ganja and charas.

40. Bhang is used by some native doctors as a medicine, and is also used in some cattle diseases.

41. (a) No; it is not a digestive.

(b) No; on the contrary, it weakens and unfits those who take any of these drugs to do much physical or mental labour. Little exertion exhausts them.

(c) Sometimes it is used in ague.

(d) No.

I refer to both.

42. The use of none of these drugs is harmless, but decidedly injurious to health. I have seen several moderate consumers and they lose flesh.

43. Yes; but on the slightest provocation they become reckless and furious.

44. Even the moderate use of the hemp drugs produces instantaneous intoxication, great excitement, and a degree of stupidity. The pupils are gradually contracted. It is not refreshing, and does not allay hunger or create an appetite for food. A false appetite is, however, sometimes caused by bhang. The effect lasts about eight or ten hours, according to the quantity taken. The after-effect is great exhaustion and lassitude, with a craving for another dose of the drug.

45. (b) They make one lose flesh and look dull.

(c) Yes; they cause indigestion and create a false or short-lived appetite and general debility.

(d) They cause bronchitis and asthma. In regard to it there is a well-known saying which has been thus translated into English by Dr. Fallon—

"Who ganja smoke do knowledge lack; the heart burns constantly. The breath with coughing goes, the face as monkey's pale you see." Many ganja smokers die of dysentery.

(e) Yes.

(f) If taken for a sufficiently long time in excess, it is sure to produce insanity with ordinary diet; but if large quantities of sugar and milk are taken by the smoker, he may hold out little longer. The insanity at first temporary soon fixes itself permanently. The person runs about shouting, grins, laughs and cries in a most unnatural and diabolical way.

I do not think the hemp drugs have any medicinal properties to relieve mental anxiety or cure brain disease.

I do not think that an insane person who is not in his senses and not master of his own deeds would often take to ganja-smoking. It might be accidental in some extremely rare cases.

46. All habitual consumers, as a rule, take to the excessive use of these drugs, and are reduced to mere skeletons, and show a most pitiful figure of physical decay and moral degradation. They are helpless to support themselves, and with their intellect deadened, bordering on insanity, lungs contracted, bowels diseased, life is a burden to them, and death a release. Many excessive ganja-smokers meet with instantaneous death at the time of smoking it.

47. It may be so; but I am not certain about it.

49. Yes, bhang is used as an aphrodisiac; but I have a serious doubt as to its possessing aphrodisiac powers. I have heard of its being used by mahants and sadhus to bring on a state of stupor on the intended victims of their lust to effect their purpose. It is also used by the prostitutes. It does cause impotence and imbecility in the long run.

58. The hemp poison is used by bad characters. It is used for purposes of rape and robbery.

53. Yes.

I do not know any case.

55. Yes. Without any admixture, any of the preparations of hemp is sufficient to completely stupefy the victim for hours.

58. It is working well in regard to revenue; but is sadly ruining the consumers of the hemp drugs physically and morally.

59. I do not think any attempt, without total prohibition or local option, is likely to remove the evil.

60. Ganja is not produced in Gaya.
 61. Charas is not produced in Gaya.
 62. Yes, by total prohibition.
 63. The only improvement I can suggest is total prohibition.
 64. It should be totally prohibited.
 65 to 67. In my opinion total prohibition is the only means to repress and remove the evil. No amount of taxation is likely to ensure this end.
 68. They should be closed.
 69. The wishes of the people, as far as I know, are not considered before a shop is opened in any locality, although a rule exists to that effect. Not only local opinion be taken, but local option allowed.

Oral evidence.

Question 1.—I am 39 years and 6 months of age. I have been four years in Gaya. I was born and brought up at Monghyr. I have been almost all over Behar visiting the *mêlas*, preaching and distributing books. Mr. Evans sent me the paper of questions, and I despatched my answers through him. I am a Baptist Missionary. I was once under Mr. Evans, and worked with him for 7 or 8 years in Monghyr. Thence I went to Calcutta for 4 years, and from Calcutta I was transferred to Gaya. Mr. Evans knew my views. I saw him in December last, but we did not then talk over the hemp drugs. When Mr. Evans and I worked together in Monghyr we often conversed about them, and had common experience about them. We worked together in the cause of temperance.

Question 24.—I do not think the figure I have given in my answer is excessive. I give it advisedly, including in the account both women and children—*vide* my answer 30. I should not be surprised if, out of every 100 persons, 30 men, 15 women, and 15 children were occasional consumers. I mix with all classes of Hindus, and have free access to their houses. Our women go to their houses, and theirs sometimes come to ours. On festival occasions they will sometimes send word that our women are not to go to them, because they do not like to be seen in an insensible state. Such intercourse is not exceptional, but is, of course, limited to friends.

Question 25.—The three shops I have mentioned are all for the sale of ganja and bhang, and in one of them also, I know, opium is sold. I have mentioned the fact in a casual way to the excise officer, but I have made no complaint. We preach in front of these shops, because it is the principal place in the *chauk*. The figures in answer 18 were furnished to me by the excise officer. But I am certain of what I have stated above, that each of the three shops sells both bhang and ganja.

Question 25.—My statement that the officers of Government deem it wise to put forth strenuous efforts to push on the trade is based solely on the fact that the trade has been increasing during the last 16 years. I have no other ground. I have also read in many temperance books and papers printed in England that loss of revenue is the last difficulty with which Government has to contend. When I saw the number of shops multiplying, the idea got into my head that it was through the efforts put forth by the Government officers. I never saw any particular officer putting forth strenuous efforts. I have seen shops opened at the *mêlas* where there were no shops before, such *mêlas* as

Sonpur and Karagola. There are others, but I can't remember their names. Those shops were opened many years ago. I have not visited Karagola for ten years, nor Sonpur for six or seven. I have never studied the official statistics of the number of shops in Bengal or in any district of Bengal. I know the shops have increased, but not from the returns. I don't say there has been any increase in Gaya in the last four years. In all the districts where I have been, the number of shops has increased within the last 16 years. That has been my impression; but I have never examined the question by accurately comparing numbers. I should be surprised to learn from the statistics that 16 years ago there were 205 shops for all preparations of hemp, and that there are now 138 in the Monghyr district, and that the decrease in Gaya has been from 114 to 81. I accept the statistics as correct. In view of the official comparative statistics, I would withdraw the answer made under 25, head (3).

Question 26.—By moderate consumer, I mean one who uses bhang or ganja to the extent which will not make him insensible or affect his brain. There are very few such people.

Question 31.—In this answer I refer to the town of Gaya. The number of shops is shown in my answer 18.

Question 33.—The educated people to whom I refer in this answer are people with whom I am acquainted, who have received an English education, students, but not orthodox Hindus. I can't give the number of such people, but they belong to Calcutta, Bankipur, Gaya, Monghyr. If you want to put down the classes to which they belong, I would say Kabirpanthis, Nanak Shabies, Dayanandies, Bramo Somajis, Muhammadans, and every one except bigoted Hindus. My answer needs no modification. Bigoted Hindus are not averse to temperance movements. A certain class are in favor of ganja, the Shaivs, not the Vaishnavs, who are against the drugs. A very small proportion of the Hindus are bigoted. The proportion given in question 24 does not refer to the opinion of the people, but to the number who take the drug, as shown in answer 30. Many who are induced or forced to take the drug share the strong opinion described in answer 33. The proportion mentioned in answer 24 must be taken exclusive of Muhammadans.

The meaning of the last sentence of the first paragraph of my answer is that if the prohibition of bhang and ganja will cause Hinduism to fall, then let it fall.

Question 35.—I say that people would not take to other drugs on prohibition being ordered, because I have known people to give up alcohol and opium.

Question 41.—My father used to keep a farm, and our labourers, who were ganja consumers, never used to work properly. I used to help my father in the farm till I left Monghyr, 12 years ago. It is on this experience that I state that little exertion exhausts ganja-smokers. Dooly-bearers do not smoke ganja. I have never seen them in possession of the sort of chillum which is used for ganja-smoking, nor noticed the smell peculiar to the habit, nor the blackened lips. I speak of the dooly-bearers of Monghyr.

Question 44.—In speaking of the pupils being contracted, I am describing the immediate effects of smoking. The eyes become red, and there is a

fixed stare, and an incapacity to wink. This is what I mean by pupils contracting.

Question 45.—I have seen three to four persons die of dysentery who were ganja-smokers, and I have heard of others. They were smoking ganja all along, and the native doctors could not check the dysentery, and therefore I say the dysentery was caused by the ganja. I have not noticed how many people who were not ganja-smokers died of dysentery. I have never heard of the drug being used as a remedy for dysentery.

Every time I have visited the Sonpur mēla I have seen four or five persons gone mad from ganja. I have had them under my notice for 10 or 12 days together. Some were sent to asylums. They were not personal friends of mine. I was told that their insanity was due to ganja.

Question 46.—I have not seen a man actually die of ganja myself; but I have seen ganja-smokers one day, and heard of their death shortly after, and heard excessive smoking mentioned as the cause of immediate death.

I have personally observed the effects I have described in 46. By "lungs contracted" I mean difficulty in breathing.

Question 57.—I refer to the administration of the drug for purposes of rape and robbery. I heard of one case of rape some years ago. In that case I cannot say whether the drug appeared on the record, but it was mentioned in pamphlets written about the case. I cannot name any other case. The pamphlets were written to expose the mahant.

Question 53.—I have seen people stupefied for hours by doses of bhang. They were persons unaccustomed to the drug.

Question 58.—When I wrote the answer, I was under the impression that the object of Government was to increase the consumption. If the statistics show a reduction of both shops and

consumption, I withdraw the statement. As regards my own district of Gaya, I see that the figures of the comparative official return show a reduction of ganja consumed from 183½ maunds 16 years ago to 93 maunds in the last year. In the earlier time bhang was not taxed. Since bhang began to be shown in the returns the quantity sold has increased. I wrote my answer without sufficient enquiry as to the number of shops and the consumption, but under the impression that Government was pressing the sale. I admit that any person making an equally grave charge against a private individual on equally inadequate grounds would be deserving of censure for his injustice. My justification is that I could not have got such comparative statistics as have now been shown to me, even if I had applied for them. The Excise Deputy Collector, at my request, furnished me with statistics for one year. I think I asked him orally for figures for 20 years or more, but he would not give them to me, nor would he have given me the figures for one year unless I had shown him the Commission's question (remark under Chapter IV). I never made formal written request of any kind, because I was certain the statistics would not be furnished to me. I knew excise reports were published each year. I have never seen one, but I have seen abstracts of them in the newspapers.

Question 69.—I have not myself made any representation to the authorities regarding any ganja shop, nor am I aware of such representation having been made by the people of any locality. I have made representation about liquor shops. In one case a shop was near one of our schools. That is the only representation I have made. The shop was shifted, but not far, and its distance from the school was much the same after the change. I represented this, but my application was rejected.

Ganja and liquor appear to me to be equally bad.

203. Evidence of the REVD. W. B. PHILLIPS, *Missionary, London Missionary Society, Calcutta.*

1. Eighteen years in Bengal, mixing freely with all classes of people; seeing effects on some, hearing of effects on others; 15 years itinerating in Murshidabad district; 15 years President of a Society worked by Christians, Hindus and Muhammadans, whose object was to promote total abstinence from all intoxicating drinks and drugs.

2. Yes. Siddhi or bhang, charas and ganja.

19. For smoking only, so far as I know.

21. Flat ganja most largely used. It irritates the throat more than round ganja; but smokers like the sensation.

23. No.

24. Bhang largely drunk by many of lower classes in Bengal.

25. Taking a period of five years, returns show increase of revenue on ganja at about R47,500, and on charas a rise from R2,772 to R7,568. Ganja and charas afford a cheap means for reaching intoxication, and on this account consumption tends to grow steadily but not rapidly. The same may be said of bhang.

27. Fishermen, washermen, coolies, cultivators, carpenters, artificers generally, devotees, and some of the middle and higher classes. Among the better classes less common now than formerly, as

alcoholic drinks have taken the place of these drugs to a large extent. Many are tempted to use ganja as an aphrodisiac. Others are drawn to its use by evil company. The criminal classes to a large extent use these drugs.

28. Men earning 4 annas a day will spend from 2 to 4 pice on ganja. They are the moderate smokers. Men with larger earnings spend from 6 to 10 pice a day. No man, however, can take more than about 2 annas worth a day by himself. Rich men may spend R1-8 per day, but that is on their whole smoking party.

29. Bhang is pounded with cinnamon, cloves, other spices and sugar; then mixed with milk and drunk as a sherbet.

Ganja is rubbed with dry tobacco leaves before smoking.

Dhatura is not used except for criminal purposes.

30. Largely in company. It is more economical to smoke ganja in company, for the effect is so speedy that intoxication comes on before a man has got half through his pipe, and it continues from 1½ to 4 hours.

Bhang is also usually taken in company. Intoxication follows in from 5 to 10 minutes.

Some women smoke ganja, but not nearly so many as take opium.

Many boys begin the habit.

31. Habit easily formed. The one difficulty is a fear of the bad effects (after the first trial); but this is usually overmastered by a craving for the pleasing effects. Very difficult to break off. Great danger of the moderate use developing into the excessive.

32. (1) On the last day of Durga Puja, when the image is drowned, it is customary for every Hindu to drink a little bhang. A mere sip will satisfy custom, and many go no further; but some drink to intoxication.

(2) In some parts of Bengal bhang is also drunk at Sib Puja, about the month of March.

33. By people generally the use of these drugs is accounted harmful. They consider that it leads to serious complaints, turns the blood black, gravely affects the chest, and brings on early death. Some people think that bhang and ganja aid digestion or keep off malaria; but the general sentiment is against these drugs. It is very commonly known that they are largely taken for their aphrodisiacal properties.

34. It certainly would be felt as a very great privation; but in reality health would improve by that privation. At the usual time for smoking if the drug cannot be got, there is much uneasiness. Some say that the eyes begin to water. Then, of course, there is the craving. But these things are not "serious." It is the results of use that are serious, and not the results of leaving off.

35. (a) Yes.

(b) Probably for a time at least.

(c) Cultivation could be checked largely.

(d), (e), and (f) Discontent, but not "serious." Not the slightest political danger. Probably to alcoholic stimulants. Let us hope that other dangerous drugs, such as opium, will be treated in the same way, and so be largely out of reach.

36. Mostly a question of price. If consumers can get intoxicated more cheaply on liquor, they will probably drift to that. Intoxication is the goal aimed at, and money is scarce.

38. Chur is the mildest, flat ganja is next in strength, round ganja is the strongest, and is also the pleasantest to use.

Chur ganja irritates the throat very much; * flat, less; round, least.

39. Siddhi is the only preparation drunk. This is less injurious than ganja smoking.

42. No. The moderate use has an aphrodisiacal effect, which must be very harmful. And it is next to impossible for men to keep on moderately always with substances of this kind. Usually lack of means is the main argument for moderation. Consumers wish to enjoy the intoxicating effects.

44. Ganja produces thirst and immediate hunger. Water is used for the thirst and sweetmeat for the hunger. This sweetmeat increases the intoxicating effect.

If smoked on an empty stomach the effect lasts

from 3 to 4 hours; if on a full stomach from 1½ to 2 hours.

Intoxication comes on almost immediately, before half the pipe is smoked.

The after-effects are nausea, langour, restlessness, dullness of brain.

The want of gratification leaves the smoker in a very restless, irritable, unhappy mood, with very little appetite for food.

45. (a) Yes.

(b) Yes.

(c) Ganja creates artificial appetite for a time, but tends to ultimate injury of appetite.

(d) Yes.

(e) Yes.

(f) Yes. The insanity in some cases is not permanent; but I believe the system suffers a permanent injury. One young man I knew was twice insane and twice recovered. But he will never be the bright fellow he was before. Moreover, a serious uncertainty is introduced into his whole life. The suggestion quoted by the Lieutenant-Governor of Bengal (Excise Report, 1891-92) "that it is as reasonable to suppose that excessive ganja smoking may be due to insanity, as that insanity may be due to excessive ganja smoking," strikes me as very unworthy of the gravity of the subject. In my own intercourse with superintendents of asylums they seemed very confident as to the cause of insanity. A fanciful witticism is scarcely the kind of thing to use at this crisis for minimising the evils done by a dangerous drug. The question suggested is about as difficult as could be proposed; meanwhile the possible welfare of thousands is jeopardized by the suggestion. Even granting any soundness to it, why should the predisposed to insanity be helped to it by Government cultivation and sale of ganja?

I believe that this question of insanity from the use of ganja is a very serious one. The effect of the drug is so powerful that in some cases just once using it has produced insanity. Judging from the ordinary effects of this drug, as described by one long its victim, insanity would appear as the natural and almost inevitable result of excessive indulgence. It creates such horrible visions, intensifies so unnaturally all the powers of mind and body, exhausts physical and mental energy, and places its victim in the direct line for the mad house. In the special case of insanity that came under my own notice, the youth was formerly very bright, and seemed among the last about whom such a future could be expected.

49. Yes, largely. More Hindus than Muhammadans take ganja as an aphrodisiac. In this use it is most injurious to the community. I believe it tends to produce impotence.

On the use of ganja as an aphrodisiac I have very strong testimony. By one who was its victim for seven years and mixed largely with smokers very great stress is laid upon this as one of the chief causes of its use. It seems evident that many youths and young men and even boys are tempted into this evil habit of ganja smoking just to encourage themselves in the excessive indulgence of sexual vices, and no doubt a very large amount of impotence is the result.

* This degree of irritation or biting is, however, liked.

51. It is the current belief that the criminal classes take these drugs to get temporary artificial energy, and relief from thought and fear.

53. It makes men exceedingly irritable, and thus liable to commit hasty and serious crime.

54. Yes.

55. Yes, in many cases.

Usually dhatura would be mixed with siddhi or ganja; but these drugs by themselves are sufficient and speedy in action upon those not accustomed to them.

56. Made very terrible by admixture with dhatura. Not usually mixed with other drugs.

Not used for personal consumption; a fear lest it should kill. But used by criminals to stupefy others.

57. Never heard of these being eaten or drunk. It is siddhi that is drunk.

58. I should like to see the cultivation and sale stopped entirely. I believe that these drugs are simply demoralizing. If Government stopped its own cultivation, it would not be very difficult to control illicit cultivation. The wild plant is not much to be dreaded in comparison with the properly cultivated ganja.

69. I never heard of such consultation. Certainly.

Written Statement put in by the REV. Mr. PHILLIPS.

1. *Opportunities of getting information.*—From December 1875, with one interval of furlough, I have resided in Bengal. During the first 15 years my chief work was itinerating in the Murshidabad District. I thus moved freely among all classes of the people and conversed with them in their own language. I also had good opportunities for seeing their hemp drug shop scattered over towns and villages.

2. I purpose giving such information as I have gathered under the following heads:—

(a) Consumers of ganja.

(b) Purposes for which consumed.

(c) Mode of consumption.

(d) Effects of consumption.

(e) Particular instances.

(f) Extent of consumption.

(a) *Consumers of ganja.*—(1) Most largely the agricultural and other labouring classes; (2) to some extent carpenters, darzies, and other artisans; (3) very largely Muhammadans of various classes; (4) almost invariably religious mendicants; (5) wandering musicians; (6) to a large extent the criminal classes of all shades; (7) some among the middle and upper classes of society.

(b) *Purpose for which consumed.*—(1) Intoxication. To sit down with the deliberate intention of seeking intoxication is not much seen in the West; but in India it is a marked feature in the habits of some of the lower orders of the people. To such people ganja offers two special attractions: first, it is the cheapest substance by which they can bring on intoxication; secondly, it is very speedy in its effects. It is thus fitted to do the greatest mischief among the very classes that can least afford to come under its baneful influence. (2) Exciting lustful passion. Among Muhammadans especially ganja is largely smoked with this end in view. It stimulates the animal passions. It thus saps their strength in two ways: first, by its own effects upon body and brain; and, secondly, by causing unnatural waste. (3) To make daring and reckless in view of crime or suffering. This purpose for using ganja is confined mostly to the criminal and devotee classes.

(c) *Mode of consumption.*—(1) Usually smoked in a small-sized hukka; (2)

three parts of ganja are mixed with one part of dry tobacco leaf; (3) the ganja is first put in the palm of the hand with a little water and rubbed by the thumb; then the tobacco is added and rubbed in. The intoxicating power of the drug increases according to the amount of rubbing it gets.

(d) *Effects of smoking ganja.*—(1) The body seems to dry up; (2) the body gets very weak, so that a man falls with a slight push; (3) greatly affects the lungs and brings on bronchitis; (4) greatly excites lust; (5) eyes become dull and bloodshot; (6) mind gets full of horrible imaginations. (I am told that this is a very striking and terrible effect of a continued use of ganja); (7) the mind becomes dull and listless, so that a man's power of earning a livelihood grows less and less; (8) insanity. It was in 1876 that my attention was first called to this effect of ganja smoking. The Superintendent of the Calcutta Lunatic Asylum pointed out to me a crowd of 100 men who had all lost their reason through this evil habit. At the time I was too new in the country to take in the full significance of the fact; but it struck me very much, and has often since, in the light of other facts, formed a painful subject of reflection. In Murshidabad District Lunatic Asylum in 1890 I also found 51 ganja victims, and was further told that an average of 12 every year enter from the same cause. (9) Early death. The people say that ganja-smoking makes the blood black and brings on bloody evacuations and early death.

(e) *Particular instances.*—(1) At Azimganj I once found a respectable man of middle age raving and acting in an extraordinary manner in the public road. The explanation was that he had been taking ganja as a remedy prescribed by a devotee for getting rid of an uneasy conscience. (2) In the same place a young man whom I knew lost his reason twice from this habit, and was confined in the asylum. (3) A respectable young man whose case came under my notice had his reason entirely wrecked, and ganja smoking was one of the great causes. (4) A young man in Calcutta, son of a wealthy zamindar, brought himself by

this habit to beggary and early death. (5) A Christian convert from Muhammadanism. This man has been three years a Christian. Previous to that he was the victim for over a year of this habit of ganja smoking, and has described to me from his own painful experience some of the mischievous effects of the habit. Rising sometimes at midnight with horrible feelings, he would wander out into the darkness. At length he got so alarmed that he broke away from the habit. (6) A short time ago a man was found taking his day's supply of rice to sell in exchange for ganja. My informant asked him why he was doing such a foolish thing. He said, "I can better endure the cravings of hunger than the gnawing appetite for ganja."

- (f) *Extent of consumption.*—Accurate information on this subject will, of course, be gained from official reports. I wish to speak only to the general impression that I have gained from seeing the numerous shops and hearing the remarks of the people. That impression is that the smoking of ganja is a very widespread evil. Only yesterday (August 10th) the following incident occurred in my presence in one of the Calcutta tram-cars. A young Hindu had bought a cheroot from a hawker. On putting it to his mouth he exclaimed in Bengali "Why! there is ganja in it!" The conductor of the tram at once answered "Oh! a great many people smoke ganja now-a-days."

3. *Concluding remarks.*—As one who has come out specially to seek the elevation and enlightenment of the masses of India, I naturally feel strongly in the direction of all influences that are tending to degrade the people. What with liquor and opium and hemp drugs of various kinds, all licensed by Government, it does seem as if the population were terribly exposed to degrading influences. It is not my province to face the difficult task of dealing with these evils; and I sincerely sympathize with the Government in the heavy duty of solving the grave problems involved. But I do feel it my duty to set forth as strongly as possible the assurance that very much mischief is being worked in the country by the various intoxicants so freely and largely sold. I shall hail with great thankfulness any measures that will relieve the peasantry of this country from some of the great temptations to vice by which they are surrounded.

Oral Evidence.

Question 25.—My calculation of the increase of consumption was based on the figures relating to ganja revenue. But I found that that was not a sound basis. I have since gained access to a larger number of excise reports. Referring to the figures of consumption for the years between 1878 and 1888, it will be seen that there was a steady increase from 5,640 to 65,50 maunds, since when there has been a steady decrease to 1893, when the figure was 5,451 maunds.

Question 30.—I have never seen any one become intoxicated from smoking. My answer is based on what I have heard from those who smoke. I have never seen smoking. I believe the English

word "intoxication" has the same meaning as the Indian word "nasha." I have recently been conducting enquiries for Mr. Wilson, and the general opinion is that "nasha" and "intoxication" are equivalent. When a man speaks about "nasha", I generally understand "intoxication" to be meant. By intoxication in regard to alcohol, I mean that a man must be a little tipsy at least, though he may not be in the gutter. I would not apply the word to the exhilaration following on a glass of sherry or a peg. I think that the word "nasha" does not apply to such exhilaration. I do not know the vernacular word for exhilaration. I do not know the word "behosh" or "madhosh." I know the word "matwala," which means a man given to getting drunk. I have used the word "intoxication" in answers 30, 36 and 44 to describe something beyond exhilaration.

Question 33.—The feasibility of prohibition applies to ganja. I am doubtful if bhang could be prohibited, as it is made only from the leaves of the plant which grows wild.

My impression is that devotees universally use ganja. I do not think that that constitutes any difficulty in the way of prohibition. I do not think the consequences of prohibition would be serious in view of the fact.

The moderate use of ganja by the working population has not come under my observation. I have heard of such use. I should expect the first six classes mentioned in my answer No. 27 to furnish a large number of moderate consumers.

I hardly care to distinguish between opium, alcohol, and ganja. I regard them all as bad. My mind is so impressed with the evil effects of excessive use that I do not care to consider the moderate use. I would wish Government to begin with ganja, to proceed with little delay against opium, and then tackle alcohol. I prefer this as a matter of policy, because ganja is easiest dealt with. I am prepared to prohibit all three intoxicants on account of the evil which I see done by all of them.

Question 45.—With reference to insanity, I was thinking of the immoderate use. I am not prepared to say anything about the moderate use, but it is the excessive use which I believe to produce insanity. I believe the moderate use does frequently develop into the excessive.

My impressions regarding insanity caused by the drugs are based on what I have heard from Superintendents of Asylums. I give the case of one young man which has come under my personal observation outside the asylums, and it is the only case I have experience of.

I heard from native members of my Mission of a case in which a single use of the drug had produced insanity. I cannot say whether it had come under their actual observation. It was upon their statement that I framed my answer about the effect of a single dose of the drug.

The young man described in the previous paragraph of my answer used to supply me with milk at Azimganj when I was itinerating. I knew him before he became insane, and when I heard he had become insane and enquired the cause, I was told that it was ganja.

Question 49.—The testimony of the aphrodisiac use of the drug is that of a Musalman who was for seven years a victim to the drugs. He is the man mentioned in this answer, and also in the last paragraph of answer 45. He spoke for himself, and also of what he knew. He did not

become insane, and is now a Christian, and has given up the use of the drug. He told me that the aphrodisiac effects were those for which the drug was principally taken. He also described other effects, which I have mentioned in the last paragraph of answer 45, and his statement appears to me to be corroborated by the experiments of Dr. Wood, which are described in the pamphlet I present to the Commission. Dr. Wood's statements at the close of the paper is opposed to the aphrodisiac effects.

Question 55.—My first answer to the question is purely hearsay, and I could not give any cases.

Question 58.—I know something of the present cultivation of ganja, and I understand that it is carried on under Government patronage, and that Government fosters the cultivation. I have not seriously thought about the precise manner in which Government fosters the cultivation. I am not prepared to say whether the position of Government in regard to ganja is analogous to its position in regard to opium—in fact, I do not know what the system of cultivation is; but my information is that it is under the fostering care of Government. My impression is derived chiefly from Government excise reports. The detailed information about superintendence of the crop and the measurement of the land gives the impression. The cultivation, I believe, requires great care, especially in regard to the eradication of the male plants, and my impression is that Government supervision is directed towards this end and the success of the crop generally. My impression was strengthened by reference in the reports to the Sibpur experiments in cultivating the plant for ganja. That was in the reports for 1891-92. It is in reference to this impression only that I use the words "its own cultivation." If I found the facts different, I should propose a different plan of prohibition.

The wild crop, having the male and female plants growing together, cannot possibly produce ganja of such a strong kind as is produced by cultivation, in which the male plant is most carefully destroyed. This is what I mean by the last sentence of my answer 58. I refer only to ganja.

See "Treatise on Therapeutics," 6th edition, 1886, p. 263.

*Paper put in by the REV. MR. PHILLIPS,
appended to his evidence.*

Personal testimony of H. C. WOOD, M.D.,
LL.D., Neurologist to the Philadelphia
Hospital.

"Some years since, in experimenting with an extract made from the American plant, I took a very large dose, and described the result as follows—(Proceedings, American Philosophical Society, 1869, vol. xi, p. 226):—

"About half-past four P.M., September 23rd, I took most of the extract. No immediate symptoms were produced. About seven P.M. a professional call was requested, and, forgetting all about the hemp, I went out and saw my patient. Whilst writing the prescription, I became perfectly oblivious to surrounding objects, but went on writing without any check to or deviation from the ordinary series of mental acts connected with the process, at least that I am aware of. When the recipe was finished, I suddenly recollected where

I was, and, looking up, saw my patient sitting quietly before me. The conviction was irresistible that I had sat thus many minutes, perhaps hours, and directly the idea fastened itself that the hemp had commenced to act, and had thrown me into a trance-like state of considerable duration, during which I had been stupidly sitting before my wondering patient. I hastily arose and apologized for remaining so long, but was assured I had only been a very few minutes. About seven and a half P.M. I returned home. I was by this time quite excited, and the feeling of hilarity now rapidly increased. It was not a sensuous feeling in the ordinary meaning of the term; it was not merely an intellectual excitation; it was a sort of *bien-être*—the very opposite to *malaise*. It did not come from without; it was not connected with any passion or sense. It was simply a feeling of inner joyousness; the heart seemed buoyant beyond all trouble; the whole system felt as though all sense of fatigue were for ever banished; the mind gladly ran riot, free constantly to leap from one idea to another, apparently unbound from its ordinary laws. I was disposed to laugh; to make comic gestures; one very frequently recurrent fancy was to imitate with the arms the motions of a fiddler, and with the lips the tune supposed to be playing. There was nothing like wild delirium, nor any hallucinations that I remember. At no time had I any visions, or at least any that I can now call to mind; but a person who was with me at that time states that once I raised my head and exclaimed, 'Oh, the mountains! the mountains!' Whilst I was performing the various antics already alluded to I knew very well I was acting exceedingly foolishly, but could not control myself. I think it was about eight o'clock when I began to have a feeling of numbness in my limbs, also a sense of general uneasiness and unrest, and a fear lest I had taken an overdose. I now constantly walked about the house; my skin to myself was warm, and in fact my whole surface felt flushed; my mouth and throat were very dry; my legs put on a strange, foreign feeling, as though they were not a part of my body. I counted my pulse and found it one hundred and twenty, quite full and strong. A foreboding, an undefined, horrible fear, as of impending death, now commenced to creep over me; in haste I sent for medical aid. The curious sensations in my limbs increased. My legs felt as if they were waxen pillars beneath me. I remember feeling them with my hand, and finding them, as I thought at least, very firm, the muscles all in a state of tonic contraction. About eight o'clock I began to have marked 'spells,' periods when all connection seemed to be severed between the external world and myself. I might be said to have been unconscious during these times, in so far that I was oblivious to all external objects, but on coming out of one, it was not a blank, dreamless void upon which I looked back, a mere empty space, but rather a period of active but aimless life. I do not think there was any connected thought in them; they seemed simply wild reveries, without any binding cord,—each a mere chaos of disjointed ideas. The mind seemed freed from all its ordinary laws of association, so that it passed from idea to idea, as it were, perfectly at random. The duration of these spells to me was very great, although they really lasted but for a few seconds to a minute or two. Indeed I now entirely lost my power of measuring time. Seconds seemed hours; minutes seemed days; hours seemed infinite. Still I was perfectly conscious during the intermissions between the paroxysms.

I would look at my watch, and then after an hour or two, as I thought, would look again and find that scarcely five minutes had elapsed. I would gaze at its face in deep disgust, the minute hand seemingly motionless, as though graven in the face itself; the laggard second-hand moving slowly—so slowly. It appeared a hopeless task to watch during its whole infinite time of a minute, and always would I give up in despair before the sixty seconds had elapsed. Occasionally, when my mind was most lucid, there was in it a sort of duplex action in regard to the duration of time. I would think to myself, it has been so long since a certain event—an hour for example—since the doctor came; and then reason would say, “No, it has only been a few minutes; your thoughts or feelings are caused by the hemp.” Nevertheless I was not able to shake off this sense of the almost indefinite prolongation of time even for a minute. The paroxysms already alluded to were not accompanied with muscular relaxation. About quarter before nine o’clock, I was standing at the door, anxiously watching for the doctor, and when the spells would come on I would remain standing, leaning slightly perhaps against the doorway. After a while I saw a man approaching, whom I took to be the doctor. The sounds of his steps told me that he was walking very rapidly, and he was under a gas-lamp, not more than one-fourth of a square distant, yet he appeared a vast distance away, and a corresponding time approaching. This was the only occasion in which I noticed an exaggeration of distance; in the room it was not perceptible. My extremities now began to grow cold, and I went into the house. I do not remember further until I was aroused by the doctor shaking or calling me. Then intellection seemed pretty good. I narrated what I had done and suffered, and told the doctor my opinion was that an emetic was indicated, both to remove any of the extract still remaining in my stomach, and also to arouse the nervous system. I further suggested our going into the office, as more suitable than the parlour, where we then were. There was at this time a very marked sense of numbness in my limbs, and what the doctor said was a hard pinch produced no pain. When I attempted to walk upstairs, my legs seemed as if their lower halves were made of lead. After that there were no new symptoms, only an intensifying of those

already mentioned. The periods of unconsciousness became at once longer and more frequent, and during their absence intellection was more imperfect, although when thoroughly roused I thought I reasoned and judged clearly. The oppressive feeling of impending death became more intense. It was horrible. Each paroxysm would seem to be the longest I had suffered; as I came out of it a voice seemed constantly saying, ‘You are getting worse; your paroxysms are growing longer and deeper; they will overmaster you; you will die.’ A sense of personal antagonism between my will-power and myself, as affected by the drug, grew very strong. I felt as though my only chance was to struggle against these paroxysms—that I must constantly arouse myself by an effort of will; and that effort was made with infinite toil and pain. I felt as if some evil spirit had control of the whole of me except the will-power and was in determined conflict with that, the last citadel of my being. I have never experienced anything like the fearful sense of almost hopeless anguish and utter weariness that was upon me. Once or twice during a paroxysm I had what might be called nightmare sensations; I felt myself mounting upwards, expanding, dilating, dissolving into the wide confines of space, overwhelmed by a horrible, rending, unutterable despair. Then, with tremendous effort, I seemed to shake this off and to start up with the shuddering thought, “Next time you will not be able to throw this off, and what then?” Under the influence of an emetic I vomited freely, without nausea, and without much relief. About midnight, at the suggestion of the doctors, I went upstairs to bed. My legs and feet seemed so heavy I could scarcely move them, and it was as much as I could do to walk with help. I have no recollection whatever of being undressed, but am told I went immediately to sleep. When I awoke, early in the morning, my mind was at first clear, but in a few minutes the paroxysms, similar to those of the evening, came on again and recurred at more or less brief intervals until late in the afternoon. All of the day there was marked anæsthesia of the skin. At no time were there any aphrodisiac feelings produced. There were no after-effects, such as nausea, headache, or constipation of the bowels.”

204. *Evidence of the* REV. G. C. DUTT, *Missionary, Khulna.*

1. As a missionary I have had occasions to mix amongst lower class people addicted to hemp-smoking (ganja).

7. Not in this district.

14. None prepared in this district.

19. I have seen people smoking ganja only.

20. Lower class people, such as agriculturists, coolies, bearers, bantias, fishermen, etc., and religious mendicants, such as sanyasis and fakirs and followers of Trinath and Kartabhajas and a new Muhammadan sect called fakirs, smoke ganja. I cannot give the proportion. Professional singers are generally addicted to ganja.

21. Flat kind of ganja is generally used.

23. Not to my experience.

24. Up-country people residing in this district drink bhang generally.

People of Lower Bengal occasionally drink bhang for medicinal purposes, especially in cases of diarrhoea and dysentery, and at times of festivals.

There are some who eat bhang occasionally.

25. I see that the use of ganja is gradually increasing.

The use of bhang is steady.

Charas is scarcely used in this district, excepting by a few only returning from up-country.

26. Moderation in ganja-smoking is almost impossible as far as I know. I cannot give the proportion.

Bhang is generally taken in moderate doses.

29. People ordinarily mix tobacco leaves with ganja. I have never seen the use of dbatura with ganja.

30. Only a few take ganja in solitude, many in company. It is mainly confined to the male sex. Generally taken at youth. Children seldom take ganja.

Bhang is taken both in solitude and in company by men, and at all ages.

31. The habit of smoking ganja is easily formed by mixing in the company of persons addicted to its use. The habit, once formed, is difficult to break off.

In the case of ganja, moderate habit develops into excessive.

32. The followers of Trinath observe a custom by which every member has to subscribe something for smoking ganja.

Whenever fakirs and Kartabhajas assemble together for religious purposes, they, as a rule, take ganja. The taking of ganja is considered by them essential, and it generally becomes excessive and consequently injurious to health.

33. The educated and higher classes of the people have a deep abhorrence for ganja. It is regarded as injurious both to body and mind. Public opinion is always against the practice.

34. It would be a serious privation, at least for some time, for the excessive consumer of ganja to forego it altogether. But such is not the case with the consumers of the other two drugs.

35. (a) Yes.

(b) Not possible.

(c) Gradually and by substituting coffee or tea instead.

(d) The prohibition may cause discontent among the excessive consumers of ganja only, but for a short time. No apprehension of political danger therefrom.

(f) The prohibition would not necessarily be followed by recourse to alcoholic stimulants or other drugs, for such are costly, and in most cases against the religious teaching of the consumers.

36. No. I do not think so.

37. The effects of charas smoking are different from those resulting from ganja smoking. The latter is much stronger than the former.

39. Smoking is more injurious than drinking or eating. Smoking ganja affects the brain and nervous system instantaneously, whereas the drinking or eating siddhi acts on the alimentary canal and helps digestion.

40. The native doctors mix ganja and other drugs with oil, and this preparation is prescribed for skin diseases.

Siddhi is generally prescribed in chronic dysentery and diarrhoea and in some forms of chest diseases.

41. (a) The moderate use of bhang only may aid digestion.

(b) I have no experience.

(c) No.

I refer to moderate occasional use of siddhi, which aids digestion.

42. The moderate use of ganja is not harmless. The unnecessary irritation and excitement of the brain and nervous system in consequence of ganja-smoking impairs the vitality, and it often produces dysentery and even consumption in advanced age, especially amongst the lower classes, for want of proper nourishment.

43. Yes.

44. The immediate effect of the use of ganja is intoxication. It is sometimes refreshing. The habitual use allays hunger. It creates unnatural appetite for the time being. The effect lasts for about three hours. The after-effects are uneasiness and depression. Want of subsequent gratification produces extreme longing and uneasiness.

45. (a) Yes, ganja.

(b) Yes; in every way.

(c) Yes.

(d) Yes.

(e) Yes.

(f) Sometimes. Boisterous type of a temporary nature. Yes, there are typical symptoms. The mau becomes boisterous and sometimes turbulent.

(g) This question is not quite intelligible to me.

An account of the cases with which I am acquainted.

1. Sriram Singh, an up-county man, residing at Khulna as a ferry lease-holder, contracted the habit of smoking ganja at an early age and died before he attained his fortieth year, of dysentery and asthma. I believe his premature death was due to his excessive use of ganja.

2. One Jhani, chaukidar of Khulna, died of dysentery, which I believe was owing to his habit of smoking ganja.

3. In one of my preaching tours last year at Daulatpur I met with a lunatic whose insanity I learned was caused by the excessive use of ganja. I also learned from the people that there were twelve other men of the same kind in and about the place, all suffering from the same form of insanity in consequence of their smoking ganja.

4. Jay Sing, a boatman of mine, was addicted to smoking ganja; he died of dysentery.

5. Two of my preachers in their younger days used to smoke ganja moderately. Few months after they got colic pain. The cause was ganja. They gave up the habit and got well.

6. A Malda man, Prem Chand, nick-named Amira, employed in a pleader's lodging here, used to smoke ganja. Of late his brain became disordered, and he wandered about like a madman for some time. Having given up the habit, he became better and attended to his usual avocations. He has, however, reverted to his old habit and is again becoming worse.

7. I am told that a rich landholder of a neighbouring village, Rakhalgachi, who was an excessive consumer of ganja, died suddenly while actually engaged in smoking the drug.

46. I have already said that moderation in ganja smoking is impossible, consequently my answers to question No. 45 apply with greater force in the case of excessive use of ganja.

47. If moderation be strictly observed, I do not think the children of the moderate consumers are in any way affected by the vicious habit of the father.

48. The diseases engendered by the excessive use of ganja are sometimes inherited by the children.

If, however, it produces insanity, the children may also be affected by it.

49 and 50. I have no personal knowledge in the matter. But I am told that ganja and charas are sometimes used as an aphrodisiac.

51 and 52. Ruffians and dacoits generally use ganja to perpetrate their wicked actions.

53. A man loses his power of self-control by the excessive use of ganja, which sometimes leads to the commission of unpremeditated crime. I do not know any particular case about it.

54. Yes; ganja is so used.

55. Criminals sometimes induce their victims to partake of ganja in order to stupefy them and further their object. A sort of extract of ganja is also sometimes mixed with other eatable things in order to make the victims senseless.

68. There are shops in this district licensed for the sale of ganja. The number of these shops should be decreased for the good of the people.

69. Never. No measures are taken certainly. Local public opinion should always be considered before a shop is opened in any locality.

Oral evidence.

Question 1.—I have been 34 years a missionary. I belong to the Baptist Missionary Society. I have worked for 33 years in the Districts of Jessore and Khulna. I have been member of District Board and Road Cess Committee, Chairman of Municipality and an Honorary Magistrate. My work consists chiefly in moving among the lower classes of the people in town and country. I was two years in England.

Question 25.—It is my general impression that the consumption of ganja is increasing, and that impression is formed on a speech made by the District Magistrate at a public meeting. The District Magistrate is a Bengali. He said that ganja was yielding a larger revenue than alcohol, but he did not say that the consumption was increasing.

Question 26.—After writing my answers I made special enquiries and found only one man who had derived benefit from using ganja in moderation. He was a preacher of the Baptist Mission and lived to nearly 100 years old. He used to take one chillum daily before going to bed. Two relatives of this man finding they could not observe moderation left off the habit. There were two other Native Christians who took ganja to excess, and had to be excluded from the congregation. I have also known many Hindus and Muhammadans—hundreds of them—who take ganja to excess. I have met these men because my work takes me among the classes mentioned in my written answer 20. I have never met one moderate consumer except the man described above. This man was my friend for 14 or 15 years, but I never knew that he smoked.

Question 45.—I believe Sriram Singh's premature death was due to ganja, because I see that people who take ganja get dysentery and asthma and die. It was not my belief alone, but that of all Khulna, where the man was well known. One of his relatives told me this was his belief, just

before I started for Calcutta to give evidence. No professional man saw the case.

Jhani chaukidar came to me for medicine, but I could do him no good, and he went elsewhere for advice. I think his death was due to ganja, because he is an habitual smoker.

I did not know the lunatic (case No. 3) at Daulatpur. I saw him, and people told me that his insanity was caused by ganja.

Jay Singh's death was, I believe, due to ganja. His wife and relatives thought so, and I accept their view. I have seen him smoking.

The two preachers mentioned under Case No. 5 are those to whom I referred in my answer No. 26.

I do not remember Prem Chand, nick-named Amira. I know nothing about the case myself, and got the information from one of my friends.

I do not think the cases of dysentery I have given were due to hard life. Boatmen in our district are not hard-worked. Dysentery is very common in my district. I do not remember to have known any other cases than those named. These men got dysentery without any previous illness. I have known cases of dysentery following on fever and spleen, many of them. My conclusion that the cases of dysentery I have named were caused by ganja is based on the fact that there was no spleen or fever.

Question 51.—I was son of a zamindar, and I remember that my father's clubmen before going out to fight used to smoke ganja. It is a recollection of my boyhood.

I have been thinking over the matter of possible restriction of the drug, and I have come to the conclusion that if Government gave up its connection with ganja the people would cultivate it more in their own homes. I blame Government because they establish new shops anywhere and everywhere without consulting the people. I believe the number of shops has increased. Government has always the increase of the excise revenue solely in view. What Government should do is to increase the revenue and at the same time reduce the consumption. If it were shown that the number of shops in the Jessore district had fallen in 10 years from 86 to 68, and in Khulna during the same period from 70 to 51, I should certainly change my view. If I learnt that the consumption in Jessore had gone down from 60 to 51 maunds, and in Khulna had risen from 40 to 42 maunds in the same period, i.e., a net decrease of 8 maunds in the two districts, I should be inclined to change my views. I tried to get official information, but failed to do so. I know the public document called the Annual Excise Report. I have never read it or looked at it. But I have read about excise matters in the papers. I got a set of the Commission's questions from the Calcutta Missionary Conference and another set from the British Indian Association. On receipt of the first papers, I tried to get information from the Government clerks, but they refused to divulge official matter. I then applied to the Collector who said he would be glad to supply me with any information I liked, but I thought it best to write what I knew, without getting information from Government.

205. *Evidence of the REV. JOHN G. KERRY, Missionary, Dacca.**Oral evidence.*

I am a missionary connected with the English Baptist Mission. I have been in India twelve years—nine years in Barisal and about a year here in Dacca and two years on furlough. My work has been chiefly itinerating work. I have been over most of the Barisal (*alias* Backergunge) District. The population is chiefly Muharamadan.

I do not think that hemp drugs are largely used. My attention was not drawn to the use until I was asked in connection with this Commission. I had heard of isolated cases, but had seen little or nothing of the drugs. I should say that hemp drugs are more used by Hindus than others. There are some sects that seem to use them most. They are sects of the worshippers of Siva. I have not seen the drug amongst boatmen; but I have heard that they use it largely. Our boat is worked by Christians and our cook-boat by Muhammadans. I have not heard of their using the drug. I should have heard from my preachers had our men used it, I think. These men have hard work; but they seem to be satisfied with tobacco. I have seen them prepare their tobacco, and have not seen them mix anything with it except treacle.

One of the isolated cases that I knew before was a member of the Kartabhaja sect. He gave up the drug for good when he became a Christian convert. I can say nothing of the effects on him. Another was a Christian servant of my own. I do not remember knowing any other cases before I began this inquiry. These are the only two people of whom I knew that they took ganja before this inquiry.

The convert above referred to was emaciated when he came to us for instruction. He is now strong and stout. This may have had to do with his hemp habit. He told me that this was the only drug his sect take, because Siva is said to have used the drug and to favour it. He said he himself used no other intoxicant; he smoked ganja.

The Christian servant was under my personal notice. We found that after taking it his eyes were bright and sharp. When we saw this, we asked him whether he had taken it. He generally acknowledged it. When we asked him about this, before we knew he took ganja, he said he took it for rheumatism. He was thin and used to say he was born so and his parents were so also. He was with me for a year or so, and has left my employ. He is in the Khulna District. He was not turned

off for this reason. He was baptized, but not a member of the church. He used to smoke only very occasionally. It was only once a week or so that we observed it. He was a good-tempered man. He was rheumatic or had something like that. But he would not accept of treatment from us.

When I received the Honourable Mr. Lyall's letter I was Secretary of the Dacca Total Abstinence Society. I am still a member, but have not time for the duties of Secretary. When I got his letter I called a Committee and was asked by them to make inquiry. There were only six Babus in the meeting, and of them none had any opinion to offer. I visited some shops with a Babu who was Assistant Secretary. We saw people come in to buy ganja and we spoke to some of the smokers. We saw a man smoking once or twice in a ganja shop; but I cannot say whether it was ganja. I had great difficulty in getting information from shopkeepers, but talked to some of the smokers. I remember a Muhammadan telling me he could give up smoking at any time; but he said he took it for his work. He said he had to work in the water a great deal and that a smoke before going into the water kept off its bad effects. I remember a mad fellow coming for ganja; but the shopkeeper would not sell it to him.

The people that I saw were generally poor people. But I saw a respectable shopkeeper in the Babu Bazar shop. The majority were coolies. Most of the sales were about two pice. I saw nothing offensive in the manner or behaviour of any one except the imbecile Muhammadan. But I think that the customers were generally in worse condition than the ordinary river-side population.

This was all I was able to do, as I was taken ill and have been ill since.

Generally I have seen nothing of the effects of ganja or its use until I searched for them. I have seen little of drinking spirits in the villages. It is very rare I believe in the villages; but it is commoner among both the lowest and the highest classes in towns. Liquor is cheap. The higher classes take foreign liquor.

My experience of ganja is too limited to enable me to form any definite opinion as to its effects. So far as I have seen, there is no apparent cause for interference in this matter. But my inquiries were cut short before I was able to arrive at any definite result. In my opinion the people of Bengal are sober: I think I can say that in regard to all intoxicants.

206. *Evidence of MR. J. MONRO, C.B.,* late Bengal Civil Service, Ranaghat, District Nadia.*

As to the noxious character of the drug, I do not think I can do better than to refer you to the public medical testimony on the subject, and to the reports of Government officials. I never heard but one opinion expressed on the subject by any medical officer, and the number of admissions to lunatic asylums of patients whose insanity is said to be due to ganja speaks for itself.

It is not within my experience that people in Lower Bengal consume ganja in small quantities to enable them to endure fatigue. Sanyasis almost universally eat it, as they say, to enable them to withstand cold. I have known it to be taken in considerable quantities at Hindu and Muhammadan festivals, and the consequences were decidedly injurious to the consumers.

* Was invited to attend at a sitting of the Commission for oral examination, but failed to appear.

With reference to crime, ganja is largely consumed by the turbulent inhabitants of Eastern Bengal. It is consumed in Behar, which furnished in former times the class of professional lathials, and, speaking from a wide experience, I should say decidedly that its use, or abuse if you like, had a marked tendency to lead to crime of violence. It was used by the old professional daccits who have now been pretty well stamped out, and by rioters generally; not, I think, by thieves or burglars. I have known several cases in which lathials had primed themselves with ganja before committing crime, and I remember a case of an attempt to murder the Judge of Patna, in which the offender had similarly given himself such 'Dutch courage.'

So far as my experience goes, ganja-eating is considered decidedly disreputable; and as for it being considered consistent with holiness, only last year a sanyasi was laughed out of the town where I was working when I convicted him of habitually consuming ganja.

As to what restrictive policy should be adopted, I should feel inclined to try the experiment of increasing the duty up to a prohibitive point. I dare say that this might lead to some illicit cultivation or preparation of the cultivated plant, to smuggling, and to indulgence in other stimulants. This probably would be the case to a certain extent; but if the consumption of a distinctly noxious stimulant could be restricted, even under such condition, I think that it would be an advantage. People will have stimulants, and it is folly to think otherwise or to devise means for the introduction of a reign of universal abstention from stimulants. The very recent disclosures as to ether drinking in Ireland in the district of "Temperance" apostles, may serve as an instance of what the result of such folly would be. But my opinion based on my experience, and what I have seen of the people of Lower Bengal, is that of the stimulants to which resort is had, none is so pernicious as ganja. Therefore I advocate its restriction, and that restriction is possible I believe.

207. Evidence of BABU PURNENDU NARAYAN SINHA, *Kayasth, Pleader and Zamin-dar, Bankipur, District Patna.*

1. Personal observations and informations collected from the consumers of the drugs.

2. Yes; they are locally known as pamri, dali, and chur respectively.

19. Yes; they are used only for smoking. But ganja is used sometimes, though rarely, for medicinal purposes as an anodyne. Chur is sometimes used in towns for the preparation of majums (sweet cakes). It is also used for the adulteration of bhang.

20. Vaishnava Sadhus, Nanaksahi Sadhus, Udasi Sadhus—in fact, all classes of ascetics—who do not use alcohol, generally smoke ganja, excepting the follower of Guru Govind (the tenth Sikh Guru). The Sikhs as a class do not smoke. Vaishnava Grihasthas sometimes smoke ganja, but in a very small proportion, say 5 per cent., or even less. There is a much larger proportion of ganja-smokers in towns than in villages. Ganja-smokers in towns also smoke charas. The ascetics do so occasionally. Charas is almost unknown in villages. Ganja and charas smoking is comparatively rare amongst Muhammadans, who are generally addicted to opium.

21. Flat and round are preferred to chur. But as they are comparatively costly, the common people resort to chur.

22. Foreign charas is chiefly used. It is imported from Nepal and the Punjab. The Punjab is preferred to Nepali.

23. No, as far as I know.

24. Vaishnava Hindus generally eat and drink bhang. The drug is particularly a favourite with the mahajan or trading class (consisting of Agarwalas, Banias, and Marwaris). It is also largely used by other classes of Vaishnava Hindus, though more in towns than in villages. The Vaishnava Sadhus, Nanaksahis, Udisis, and Sikhs also eat and drink bhang. As a rule people who like some sort of intoxication, but cannot on religious and other grounds touch alcohol, resort to bhang.

25. Cannot be said to be either on the increase or on the decrease as far as I know.

26. Consumers of ganja are generally habitual excessive consumers. Smokers of charas are occasional consumers. Generally the consumers of bhang are habitual moderate consumers. A small proportion of the consumers are occasional consumers, both moderate and excessive.

27. *Ganja and charas.*—The consumers are chiefly those classes of ascetics who are prohibited from drinking wine, and who are not prohibited, like the followers of Guru Govind, from smoking. As these people have to move about, and as they are exposed to the inclements of weather, they smoke ganja and charas as a preventive of diseases. Some of them are also of opinion that concentration of mind, which is necessary for meditation, is helped by smoking these drugs. Some use it for aphrodisiac effects, especially family-men.

Bhang is chiefly used by Vaishnava Hindus, whether ascetics or family men, also generally by the mahajan classes. It is liked by those classes, as they are strictly prohibited from touching wine, and as its intoxicating effects are mild and exhilarating.

28. A pice per day may do for bhang, whether the consumer is moderate or excessive. But consumers of ganja generally require from one anna to four annas. Consumers of chur, who are very poor, require less. It is on account of its costliness that ganja is generally smoked in company.

29. Chur is exceptionally mixed with bhang to make it more intoxicant.

In Behar bhang massala consists of the following ingredients:—Sounf (*Anethum*), kasni (senna), seed of khira (*Cucumis sativa*), seed of kakri (*Cucumis utillissimus*), gul khairo, zeera (*Cuminum*), mulhatti (liquorice), and misri (sugar-candy). Rich men also add almond, raisin, cardamom, musk, and saffron.

30. The consumption of bhang is practised in solitude; that of ganja and charas in company. It is confined mainly to the male sex. Females rarely, if ever, use ganja and charas. They sometimes use bhang. Children do not consume

either ganja or charas. But they sometimes consume bhang.

32. In Holi and Dasahara bhang is consumed. The use of the drug is not essential, but has been sanctioned by custom, and, by association, is looked upon as essential. Generally the use is temperate, and is not likely to lead to the formation of habit.

33. Public opinion sanctions the moderate use of bhang. The use of ganja is always in disrepute, except in the case of ascetics. This sentiment is due to the bad effects produced by ganja, especially the irritable temper and impulsive violence generally noticed in the consumer. Ganja-consumer is a word of reproach, meaning one who acts as if he has lost all sense. There is no custom of worshipping the hemp plant.

34. It will be a serious privation to ganja-smokers to forego the consumption of the drug, only when the practice is old and becomes a habit. Charas is not habitually used in smoking. The foregoing of the drug will not be a serious privation. The consumption of bhang is an inveterate habit with many, and the foregoing of the drug will be a serious privation to many.

35. It would not be feasible to prohibit the use of ganja and bhang, but it would be feasible to prohibit the use of charas. Certainly there will be illicit consumption of ganja and bhang. The prohibition of these drugs would occasion serious discontent among the consumers. As the prohibition will affect Naga Sadhus, who are very assertive of their rights and fearlessly bold, and a large number of people of the illiterate classes, it may lead to some sort of political danger.

36. The prohibition cannot be followed by recourse to alcoholic stimulants in the case of Vaishnavas and Nanaksahis, who may, as a last resort, take to opium, though it is hated at present by many.

40. Bhang is prescribed for diarrhoea and indigestion by kavirajes. It is also used in the treatment of cattle disease.

42. I consider the moderate use of bhang to be harmless, as far as physical health is concerned. I have seen hundreds of moderate consumers of bhang keeping good health and good temper. Excesses only lead to forgetfulness. But I condemn intoxication in any form, however slight, as injurious to a man's spiritual development.

43. Moderate consumers of bhang are inoffensive to their neighbours. Moderate consumers of ganja are rarely to be seen. All ganja-smokers are more or less offensive. Smokers of charas are

almost invariably excessive consumers of ganja, so they are offensive.

44. The immediate effect of the moderate use of bhang on the habitual consumers is *nil*. After an hour or so it produces intoxication. It creates appetite. The effect lasts for 12 hours or so. There are no after-effects. The want of subsequent gratification produces a longing as well as uneasiness.

45. Habitual moderate use of bhang does not produce noxious effects on the body nor on the mind, except forgetfulness, when the use is long and continued. Moral effects, as they are understood, are not also bad, for bhang undoubtedly produces a serene temper and quiet disposition. But effects on the spiritual man are decidedly injurious. Bhang has none of the bad effects detailed in the question except laziness. Ganja impairs the constitution and makes a man thin. It injures the digestion and causes loss of appetite. It causes dysentery and affects the lungs. It impairs the moral sense. It does not induce laziness, nor does it necessarily induce habits of immorality or debauchery. It deadens the intellect.

The aforesaid effects follow both moderate and excessive use of ganja. Even habitual moderate use produces some sort of temporary insanity. But excessive use generally produces temporary insanity, and, in many cases, lasting and permanent insanity. The symptoms of insanity are of a violent character. The person affected is subject to fits of anger, when he forgets himself entirely. The power of reasoning is gradually lost. When the fits pass away, I have found some affected persons repentant and amenable to reasoning.

46. In the case of insanity which I have noticed, weakness of brain had been previously induced by debauchery, and smoking of ganja affected the weak brain. My impression from about a dozen cases known to me is that a person not given to sexual excesses may become violent in temper by excessive or moderate use of ganja, but they do not become insane. But when debauchery is accompanied with excessive smoking of ganja, some sort of insanity, temporary or lasting, follows.

51. I do not think moderate use of any of these drugs has anything to do with crime.

53. Excessive indulgence in ganja may incite to unpremeditated crime, generally violent.

54. Not that I know.

55. I do not think. Complete stupefaction without admixture cannot be induced.

208. *Evidence of BABU MAHENDRA CHANDRA MITRA, Kayasth, Pleader, Honorary Magistrate, and Municipal Chairman, Naihati, 24-Parganas.*

1. As a vakil coming in personal contact with various classes of people of Lower Bengal.

2. May be accepted. In or about Calcutta the drugs are known as siddhi or bhang, charas and ganja.

3. Abundantly grows in Rajshahi district.

4. The plant is known as siddhi and the leaves as bhang or siddhi.

5. In damp soil the plant grows.

6. Dense.

7. Not cultivated, but it grows wild.

(a) No.

(b) No.

(c) Yes.

(d) None.

Small in Nadia District, extensive in Rajshahi.

10. I am told that the cultivators of the hemp do not form a special class.

11. There is no cultivation. The wild plant

produce no ganja nor the resinous substance known as charas. The plants are male.

12. No, not in the Lower Provinces of Bengal.

13. I am informed the female plant is extensively cultivated in Nepal, Terai, Gorakhpur, and many other districts of the North-Western Provinces for ganja and charas. The best charas comes from Kasghar in the north-eastern border of China. It is highly priced, and is a luxury to rich people.

14. (a) No.

(b) No.

(c) No.

See answer to question No. 7.

15. As far as I am aware, green leaves are plucked from the plants and dried and kept for drinking purposes.

16. Male plants produce the best bhang, and it is prepared in the houses of the people. The leaves of the female plants may be used as bhang, but as a rule they are discarded, being very strong if used as a drink.

18. If kept with ordinary care, ganja and bhang do not deteriorate for two years, but charas can be preserved in good condition for much longer time. The former lose much of their strength after two years.

19. Used only for smoking.

20. These people who are exposed to inclemencies of weather, such as boatmen, carriers of loads, palki-bearers, fishermen, night-watchmen, men who spend their lives in manual work, and sanyasis. Charas is not used by low class people. The men of the higher class rarely use it too.

Hindu and Muhammadan mendicants, village cultivators, day-labourers in the fields, boatmen, up-country Hindus, and Muhammadans of the lower classes, cartmen and the women of the town are chiefly the classes which supply customers to the vendors of ganja, charas or bhang.

It is difficult to determine what particular class is addicted to what particular form of the drug, or if all the classes are equally fond of all the forms of the drugs together. But from a careful observation of all the facts falling within my own experience, I venture to think that ganja claims greater number of votaries, drawn almost equally from all the sources enumerated above, than charas or bhang, which should take a second place in this connection. Charas is the favourite form of the drug indulged in chiefly by the women of the town and the men who resort to their places, particularly the younger men. Charas is also favoured by a class of young men of a higher status in life apart from the classes described above. Bhang is used almost exclusively by Hindus without distinction of classes. It is taken by them in the form of a drink, generally with the object of stimulating appetite which was weakened by indigestion or other causes.

21. The flat kind is commonly used in these parts. Smokers would prefer the round kind, but it is dearer.

22. Native charas is chiefly used.

23. Not aware that bhang is used for smoking.

24. Bhang is used by sanyasis (ascetics), both eaten and drunk. The up-country durwans and up-country traders are the largest consumers. In Bengal, I may guess, the proportion is one to four thousand.

By far the greater number of the drinkers of bhang consists of the Hindu sanyasis, who make it

a point to drink it in pursuance of the dictates of a religious sentiment. It serves the purpose of casting away the sad thoughts of a sanyasi's life who, while he is conscious of his being a unit of the busy world around him, yet feels himself abandoned and neutral and an intruder in society according to the practical experience of life. The drink enables the sanyasi to pass the time in pleasant and pleasurable mood, and he who is sincerely a seeker of truth is enabled to fix his attention to religious contemplation unmoved from the object to which he had directed his thoughts.

The Commission wants to be informed if any special class uses the drug in moderation or in excess. The mendicants excepted, all other classes use it in moderation.

Excess, in the sense the term is used in the question, signifies, I opine, a quantity used which brings on intoxication of a degree which would render the user incapacitated for a time. Among habitual users, there does not appear any visible symptom of physical failings under the influence of the drug taken in excess. Excessive indulgence is very frequently noticed among the lower order of people of all the classes.

25. On information I may say the use of charas is decreasing daily. I can't say the use of ganja is decreasing at all.

28. The quantity consumed daily by a moderate smoker of ganja or charas is about $\frac{1}{2}$ of a tola. A moderate drinker of bhang consumes about $\frac{1}{4}$ of a seer in a month.

N.B.—The weight of a rupee is a tola, and eighty such tolas are in a seer. One pice or at most two pice worth of ganja or charas will be enough to satisfy the cravings of a moderate smoker. A moderate drinker of bhang will be satisfied for a whole month with a quantity purchased at half a rupee.

29. Ganja is smoked with a little tobacco leaf mixed with it. The compound is moistened with water and cut with a knife repeatedly till it becomes thoroughly mixed and ready for the fire. Charas, before being smoked, is placed in the heart of globule of manufactured tobacco and slightly heated; then the two are mixed up together and smoked. The admixtures are given to modify the action of the drug and to give an agreeable flavour. Bhang is made stronger by the admixture of sugar, kitchen cobwebs, black-pepper, and some other ingredients of a pungent nature. Ordinary drinkers do not mix dhatura, except the sanyasis.

30. Except under medical advice, the women and children do not take bhang. Charas is the favourite form of the drug indulged in chiefly by the women of the town and the men who resort to their places, particularly the younger men. Ganja and charas are generally smoked in company. It is mainly confined to the male sex. It is not usual for children to consume any of these drugs.

31. The habit of consuming either ganja or charas is not easily formed. After the habit has been formed one cannot easily leave it. The habit of eating bhang is comparatively more easily formed, but it is more easily given up. There is no tendency in the case of any of these drugs for a moderate habit running into excess. They are not known to run into excess.

32. On the occasion of the Bijaya day after the Durga Thakur is thrown into the river or any sacred place, this custom is observed. All the members of the family, as also many villagers, sit

together in an assembly. The priest throws the water over their heads. The bhang is then circulated. It is a harmless one. I think it is essential. It is generally temperate, and by no means excessive. The drug is often used on such occasions as a sleeping draught to give tone to the system after the wear and tear of a toilsome day.

33. It is an opprobrium to the gentleman or Bhadrak class to make a public display of their habit of smoking ganja or charas. The plant is never known to be an object of religious worship or veneration.

34. It would be a serious thing to several classes of consumers if they are required to forego the use of the drugs. Bhang is a remedy to those who are suffering from chronic bowel complaints or want of appetite. Ganja is not only a solace, but a necessity of life to persons who work in the sun and keep up nights, or who undergo hard manual work.

35. It would not be feasible to prohibit the use of this drug by compulsory legislation. The use of the drugs (ganja and bhang) may be viewed as a necessity considering the climate of the country and the condition of its people. The use of the drug is so bound up with the habits of the people that its prohibition will be considered a hardship. The use of the drugs is so great a necessity to them that it would be practically impossible to prohibit the use. The result of the prohibition is apprehended to bring illicit consumption to a large extent. Certainly the prohibition will occasion serious discontent. Of course there is no political danger because the discontented people are not many in number in comparison of the population of the country. The prohibition will be followed by recourse (a) to alcoholic stimulants.

Another grave issue hangs upon the question. There can be no doubt that the drug in one form or other is in extensive use at the present time; and that from ages it has been so used is evidenced in the ancient works of Hindu sages and philosophers. Their Great God—Mahadev—was a votary of this drug, and ancient writings have sanctified its use on that account. There are numerous passages in the writings of the ancient sages in which the taking of siddhi (bhāṅg) is strongly recommended. For instance, in the Debi Purana, a book held in high respect amongst the Tantriks of this country, occurs the following passage:—"It being said that siddhi is contemplation." "O Goddess, drink it for purposes of contemplation, as by drinking it, ever and anon, Mahadeva attained immortality." I venture to think that it would not be good policy to deprive the country of its use. Moreover, the drug is an intoxicant and very many people take it with the object of obtaining the relief and happiness which it furnishes to its users. Thus, the craving for the intoxicant has become the prevailing passion of the people, and if law removes the drug from the category of licensed article for popular consumption, popular taste and tendency for intoxicants will surely be diverted to something else, and that something is as surely to be the poisonous drink which goes by the name of imported liquor. The prohibitive enactment would thus lead the people from a less to a greater evil. Before the days of the Excise Law, people used the drug with perfect freedom; and if in those days the people had the good sense of using the drug in such proportions as to avoid the disasters of excessive indulgence, the introduction of the restrictions under the Excise Law still further advanced the cause of moderation, and protected

the people against possible extravagance in its use. The Excise Law itself is a safeguard against the possible evil.

Viewing the question from these points, prohibition is neither feasible nor desirable. All that can be recommended in this connection, if we assume that, from informations gathered that there is evidence of demoralization of popular tendencies, and a depreciation of popular energies, that the law may be modified so as to stay the course of those evils and save the people from themselves.

36. There is good reason for thinking that cheap alcohol has replaced ganja and charas to a considerable extent. I am aware of people formerly addicted to the above drugs taking to alcohol-drinking.

38. The intoxication produced by round, flat, and chur ganja differs in their effect in degree. Round is the strongest, flat less so, and the chur still less.

39. The general belief is that smoking and eating bhang is less injurious than smoking ganja and charas.

40. Yes, bhang and ganja form ingredients for standard medicines of the kabiraji system. Bhang is used in the treatment of cattle disease.

41. I can speak of ganja and bhang only.

An aged labourer is enabled to carry on his vocation without feeling any sense of fatigue. Dyspeptic persons have their appetites stimulated and day-labourers earn greater wages from the invigorating virtues of the drug. Boatmen ward off cold and stand in a better frame of body to work in all weathers. Mendicants feel the same advantages in their nomad condition. Bad characters feel more venturesome in committing misdeeds, and immoral persons to enjoy the pleasures of licentious habits. Men with religious tendencies devote themselves to the contemplation of the higher concerns of life, and for these objects and benefits and pleasures, the use of the drug is so widely diffused. Ganja has a famous name *Turitanand* which the consumers have given it in their affectionate regard for its virtues. It gives delight in a moment.

(a) Yes.

(b) Yes.

(d) Read answer 20.

I am informed men of all classes of the community make use of bhang and ganja for medicinal purposes.

42. The use of bhang and ganja is not only harmless, but beneficial to the people, as explained in answer 20.

43. Yes, generally inoffensive to the neighbours, but they are irritable.

44. The use of bhang and ganja is refreshing and exhilarating to habitual consumers; it produces no intoxication. It does not allay hunger; rather it creates appetite. The effect lasts for two hours or so, or even less than that. It produces no after-effects.

The effects, apparent from the use of the drug in different forms, do not vary much in ganja or charas, perhaps because they are so nearly allied to each other, and bhang being consumed in the form of a drink does not give facility for using moderate quantities when the drink begins to operate. When the drink begins to operate the first drowsiness makes the patient helpless for further efforts or liking for the drink, and generally he

wakes up after a few hours' sound sleep with a giant's appetite for food.

45. Confining to the moderate use of ganja and bhang—

(b) No.

(c) No.

(e) I am not aware of.

I am not aware that the use of bhang has produced insanity, nor that of ganja, although it is a widespread belief that the use of ganja produces insanity. I have not come across with such a case. The drug when moderately used generally produces beneficial effects, but contrary is the result when used in excess. The evidence of beneficial effects lies in the general healthiness of the moderate user and in his willingness and ability to work; he is less susceptible of being affected by cold and is protected against the ordinary ills to which the non-users are subject. On the contrary, those who indulge in the drug to excess, that is, in various proportions, degrade themselves to a state of vagabondism and often are afflicted with dysentery and the infirmities consequent upon a state of premature old age. They cannot work. They are not active. They keep low company and are ostracised by society. They do not live to an old age.

47. Certainly not. I think there are no grounds to come to a conclusion that it is a hereditary habit.

49. The prostitutes use charas, and some young men.

51. I don't think the use of these drugs can be connected with crime as cause and effect. Habitual consumers are known as open-hearted people.

53. Not known.

54. In a few cases reported.

55. Don't know.

56. Read answer 29.

57. Don't know.

62. The cultivation of the hemp should not be controlled.

63 and 64. No.

69. The system of indiscriminate grant of licenses, without considering or consulting the wishes of the people of the localities to which licensed stalls are assigned, is, I venture to think, faulty. Except a mere formal enquiry, as is at present done, the administrators of the law do not go further to ascertain if there was a necessity for such stalls in given places. If Government is not prepared to grant local option, something might be done to ascertain local opinion by means of Gazette Notifications, as is done in other matters relating to the administrative arrangements of Government. I may be permitted to say that the

privilege of local option is a highly important boon; but the difficulty of its introduction is not to be overlooked. His Excellency the Governor of Bombay in his reply to the address of the Sholapur Association, dated the 23rd October 1892, pointed out the adverse arguments against its introduction. "Up to the present time, although the question has been argued a good deal in England, it has not been given effect to, and there still remain a certain number of people who believe it is not desirable that those people who have no intention of taking too much should be prevented from taking even one glass of what they want or what may be good for them, because of a slight difference in voting power such as I have indicated. I would ask you how you are going to apply this principle of local option. Are you going to call on each male in your district to vote, or are you going to ask each one who has a vote in your Municipality to vote? And how are you going to apply it outside the municipal area? Do you think that the people of Sholapur are sufficiently acquainted with the rights and powers of the franchise to exercise their votes fully and fearlessly? All these points would have to be considered before we could give effect to the principle of local option as you desire. Another important fact to be considered is this. Localities at present are given every opportunity of recording their opinion for or against the opening of a shop, for a petition may be sent to the Collector, who is, under the orders of Government, bound to give attention to the views of the people of the district and forward them to Government. If there was a very strong feeling shown throughout the Presidency that local option should be adopted, that opinion would undoubtedly weigh strongly with the Government." I would, however, beg leave to suggest that a sort of local option may be conceded, as in Burma, in places which are under the jurisdiction of Municipalities or Local Boards, and whenever it is proposed to open a new retail shop for the sale of opium or spirituous liquors within the limits of any municipality, the Municipal Committee must be informed of the proposal and of the exact locality and must be invited to express their views regarding the proposal. I may take the liberty of submitting that a tentative measure like this may be adopted as an experiment. I am fully aware of the fact that a grave responsibility is thrown upon the shoulders of the Municipal Committees and Local Boards, but the principle may be tried in some selected places, the final order being with the Collector or the Commissioner of the Division. As a matter of fact, these high functionaries are chiefly to depend upon the Police for necessary information on the subject, but I am of opinion that the committees, like those I have suggested, are far more competent than the Police to advise the administrators of the Excise Departments in matters like these.

209. Evidence of BABU RAM DHARI LALL, Assistant Government Pleader, Darbhanga.

20. To my knowledge there are no special classes, but solitary instances of some fakirs using ganja and bhang.

28. The amount must vary according to circumstances.

31. Yes. People given to moderate use, may generally be tempted to make excessive use of these drugs.

32. Some low caste people make nominal offering of ganja to an idol named Solais at the time of worship.

45. All these drugs when used for some length of time affect the brain; especially ganja, when used in excess, tends to produce insanity. All these drugs also produce intoxication. Bhang used in very small quantity is good for dyspepsia.

55. No knowledge or information about this.

35. The use of hemp drugs should be prohibited. This can be done by Government orders declaring the use to be an offence punishable by the Indian Penal Code. Exception may be made for the use on a very small scale for religious and medical purposes.

59. In my opinion the present excise system is defective in that it does not sufficiently provide

for the illicit consumption and use of the drugs in question; also it does not contain any provision for the prevention of its use.

35. It is desirable to lay before the Commission that the opinion prevails among the educated classes that the use of these drugs being injurious from moral, social and medical points of view, steps should be taken to minimize the evils by passing stringent enactments against its use.

210. *Evidence of BABU MADHAVA CHANDRA CHATTERJEE, Brahmin, Pleader, District Court, Dinajpur.*

1. I am the born resident of a village in the district of Dinajpur, from which village the ganja cultivations I have spoken of in my answers are only six to ten miles distant. I have seen the cultivation of ganja. In my early years I had very frequent opportunities of seeing many ganja smokers, and I am acquainted with several persons who drink bhang. I know very little of charas or of the method of preparation of this drug and of ganja. Wild hemp plants I have seen in abundance in various places in the districts of Bogra and Dinajpur.

2. Yes; the definitions seem to me to be correct. The first variety obtainable from the hemp plant is locally known by the name of siddhi and occasionally called also bhang. The second variety is called charas. The first variety of ganja is called chebti or chepti (flat). The second variety is, I think, called Jassura, but I am not sure of this (round). The third variety is called chur or bhangri (broken).

3. In the districts of Bogra and Dinajpur. I consider the spontaneous growth of the hemp plant in the district of Dinajpur to be abundant, but I cannot say if it grows more abundantly in any other district.

4. As far as my knowledge extends, it is known by only one name, at least in the two districts I have mentioned above. This name is bhang, though I must own that educated people sometimes call it bijaya and sometimes siddhi.

5. As far as I know, the hemp plant does not spontaneously grow in low lands, or in very dry and hard soil; its growth does not seem to me to depend very much upon rainfall, as I have seen wild hemp plants to grow usually in what were known as seasons and years of general drought. Lands fit for cultivation of paddy are not congenial to the growth of the plant.

6. If not obstructed, the wild plant generally grows very densely.

7. The hemp plant is cultivated within my knowledge in a part of the district of Rajshahi and in some villages, which, I believe, belong to the district of Bogra, the extent of the cultivation being greater in the former than in the latter place. I do not know if the hemp plants cultivated in these places are utilized for the production of charas, but, as far as I know, they are not utilized for fibre or seeds. The principal use to which the cultivated plants are turned in these places is the production of ganja, though I have reason to believe that some use is made of the leaves unfit for this purpose for the production of what is used as siddhi or bhang.

8. I do not know.

9. I am not very familiar with these.

10. As far as I know, they are of the same class

as other agricultural cultivators, at least in the places I have mentioned in my answer to question No. 3.

11. As far as I know, no.

12. No.

13. No; as far as I know, the cultivation is not restricted to any particular district or districts, yet it is a fact that the cultivation is not common to all districts. I think there are some special conditions under which alone the cultivation is possible. As far as my knowledge goes, lands somewhat moist, though sufficiently raised above ordinary level to prevent accumulation of rain water, are specially suited for the cultivation. Another condition seems to me to be that the soil be not very hard like the *rar* lands in the districts of Burdwan and Birbhum, or hilly and dry like those of some parts of the Sonthal Parganas. Lands of a soft and alluvial character are, I think, specially fitted for the cultivation; better still if silted up riverbeds of sufficiently long standing are available. I think further that the plant requires for its growth lands over which the average rainfall is from 30 to 50 inches in a year; but of this I am not very sure. As to what special conditions of climate and elevation above sea-level are necessary for the cultivation of the hemp plant for producing ganja, I have no knowledge.

I think the cultivation of the plant will be impossible generally in districts like Burdwan, Birbhum, and Sonthal Parganas.

14. Yes, in places round about Naogaon in the Rajshahi District. The places belong mostly to the district of Rajshahi, and, if I have been correctly informed, also to Bogra. I do not know the extent of the preparations. As far as I know, all these three varieties are produced.

15. I know only the method of preparation of bhang from the wild plant. The plant that is used for this purpose is generally the female plant, though the male plant is also occasionally made use of. The method of the preparation is to take some leaves from the plant, and, after leaving out the dry and withered or half withered leaves, to expose them to the sun for some time. After the leaves are dried for some time, they are boiled in a mixture of from 10 to 25 per cent. of milk and 90 to 95 per cent. of water.

After drying the leaves once again, they are fit for use as siddhi or bhang.

16. Yes; bhang is generally prepared by the people in their own houses, and it can be prepared from the hemp plant wherever grown. It has never occurred within my experience that ganja or charas is prepared from the wild plant, far less from the wild plant wherever grown.

17. Ganja and charas are prepared, as far as

I know, exclusively by the people who cultivate the plant, while siddhi is prepared by all classes of people indiscriminately.

18. Bhang prepared from the wild plant does deteriorate by keeping. I do not know if the others deteriorate also. I think bhang loses its effects altogether by lapse of time. By ordinary care bhang may be kept good for one to three years, but from the second year it begins to lose its intoxicating and narcotic properties little by little. I do not know if the other two varieties deteriorate. I do not know the causes of deterioration, or how deterioration could be prevented.

19. As far as I know, ganja and charas are almost exclusively used for smoking, though occasionally, but very rarely, the former is used for drinking by people who have been thoroughly habituated to the drink. This latter use of the ganja is almost always conditional upon the want of the siddhi proper, or prompted by a desire to get stronger drinks than what is obtainable from bhang.

20. A very small proportion of the people smoke ganja and charas. These people are generally of the lower order of society. Ganja-smoking obtains more or less in almost all districts of Bengal proper, while the people of Behar and Sonthal Parganas residing in Bengal are, comparatively speaking, greater smokers. Excepting Bengal proper, I have no knowledge of the extent to which, and the class of people among whom, ganja smoking prevails in other parts of the country.

21. The round variety of ganja is preferred.

22. I do not know of any foreign charas.

23. Bhang is very rarely used for smoking. It is never smoked except when confirmed and habitual smokers cannot get ganja to smoke or cannot procure it for want of means. Its use for smoking even among the poor ganja smokers is only temporary, for they have an inveterate tendency to procure ganja with the first penny that they can turn.

24. I have never seen any people eat bhang, except with some other thing or a substitute for bhang; but, unlike gang-smoking, the drinking of bhang is not restricted to any particular class of people. Many respectable people drink bhang occasionally, and some respectable persons are even habitual drinkers of the drug. The worshippers of Jagannath in Orissa and the Dobeys, Chowbeys, &c., of the North-Western Provinces who make tours in different parts of Bengal are, almost without exception, habitual drinkers of bhang.

25. I have no accurate information, but I think the use of all the three drugs, and more especially of the first two, is on the decrease. My reason for thinking so is that in the same localities I now see a smaller number of people to use them than I saw in my early age.

27. Habitual excessive consumers of ganja belong to the lower classes of society, while occasional moderate consumers and occasional excessive consumers are to be met with (though the instances are rare) in the higher classes of society as well. This also applies to the consumption of charas. As regards bhang, my answer to question No. 24 states all that I know about it. I do not know the habits of life or circumstances which mainly lead to the practice.

28. I cannot say what the cost is for consumers of bhang and charas.

For ganja smokers—

(a) From two to four pice a day.

(b) From two to four annas, and sometimes six annas a day in exceptional cases.

29. Dry tobacco leaves are ordinarily mixed with ganja in order, I fancy, to dilute the smell and soften the strength.

Some or all of the following ingredients are ordinarily mixed with bhang, *viz.*—(1) seeds of cucumber (sasa), (2) poppy-seeds, (3) anise, (4) cloves, (5) cardamom, (6) pepper, and (7) milk. Exceptionally, bhang is mixed with—(a) coconut-water, (b) juice of date-tree (not toddy), (c) syrups, (d) rose-water, (e) keora-water, &c. In very exceptional cases, dhatura may be used for enhancing the intoxicating effects of the three drugs, but I have never known any such case, excepting one, in which dhatura was mixed with bhang without the knowledge of the consumers in order to perpetrate what I consider to be a practical joke.

The object of using the above admixtures, especially those marked (a), (b), (c), (d), and (e), is to make the drinks spicy, cool, sweet and fragrant.

Yes; a kind of bhang massala is sold in the bazar, consisting mostly of articles marked (1) to (6) above, together with some others of which I have no idea. I have seen such massala in Calcutta.

30. Usually these three drugs are consumed in solitude, but in localities where more people addicted to the drugs are available, the consumers prefer to, and they do generally, form groups and companies in order to enjoy themselves better. As regards ganja, the shops where it is sold are almost always used by several people at a time for the purpose of smoking. Indeed, they are places where the largest number of people necessarily meet together, and whatever be the object of their going there, if they are smokers, they join, and are taken in by the company that might be already sitting from before.

Except by habitual drinkers, bhang is always drunk in company, and even habitual drinkers like to have companions if they can get. Children, do not usually consume these drugs. Excepting this, it is not confined to any time of life. Except prostitutes, females do not use them.

31. There seems to be no difficulty in getting habituated to the use of these drugs. Of the three drugs, the difficulty in getting habituated is, comparatively speaking, greatest in the case of ganja. Even in the case of ganja, excepting persons of very delicate and extremely nervous constitution, one has to smoke a little every day for a few days in order to be able to withstand the narcotic effects; and when this is to a certain extent overcome, there seems to be no other difficulty in the way. I do not consider it to be very difficult to break off the habit of using any of these drugs. Here also the difficulty is greatest with the ganja smokers. Excepting habitual excessive consumers of ganja, all others can, I think, easily break off the habit. I do not consider the difficulty of breaking to be anything like insuperable even in the case of habitual excessive consumers of ganja; but I must note that instances of excessive habitual consumers of ganja giving up the habit is extremely rare, and none is known to me. I think there is a tendency in the case of ganja and charas for a moderate habit to develop into the excessive.

32. As regards ganja and charas, there is none, excepting that some people, their number exceedingly few, resort to them—more to charas than to

ganja—for making merriments. People who have religious objections to drinking spirits do sometimes make siddhi take their place on merry-making and festive occasions. This also is not very extensive. Bhang is most extensively used on the evening of the last day of the Durga Puja. After the puja is finished, and after the images are immersed in water, comes a time for a social gathering for the purpose of mutual greetings. During this time obeisances are made, embraces exchanged, and every guest is presented with sweets and bhang. People who never drink bhang do drink on this occasion. This is usual, though not universal. I do not consider the use of bhang on this occasion to be essential. It is generally temperate and not excessive. I do not think it is likely to lead to the formation of the habit or to be otherwise injurious.

33. The use of all these drugs is generally held in disrepute, but the odium is greater in the case of charas than in that of bhang, and still greater in the case of ganja. This is generally the turn of public opinion. In regard to Muhammadans, this opinion may be regarded as religious, but with the Hindus it is merely social. It is a religious prohibition for the Muhammadans to use anything that intoxicates; and though this is not the case with all the different sects of Hindus, yet they generally regard the use of any intoxicating drug as morally wrong, except when it is for spiritual benefit, such as concentration of mind, etc. It is to this I think that the sentiment of disrepute has its origin.

I do not know of any custom of worshipping the hemp plant. I have never seen any.

34. No doubt habitual consumers may feel some difficulty in giving up the habit, but I do not think the difficulty even with the habitual excessive consumers would be so great as it is with confirmed opium-eaters or opium-smokers. Though I personally do not know any, I have heard of cases in which confirmed opium-eaters, when imprisoned, have given up the habit under compulsion, though with extreme difficulty, sometimes necessitating their removal to hospital for a time. Ganja-smokers, when imprisoned, have never been heard to have presented any such piteous spectacle. With regard to consumers of charas and bhang, the difficulty is still less. Bhang consumers may give up the habit without any serious difficulty.

35. I think it would be feasible. There would certainly be some tendency to the illicit consumption of the drugs if the use of it be prohibited. The prohibition may be enforced by legislative measures. A register of the consumers in each village may be prepared through the agency of the police; and if these persons in particular are kept under proper

and constant surveillance, the prohibition will, I think, be effectively enforced. No doubt the prohibition would occasion some discontent among the consumers, but not of a very serious nature. I do not think the discontent would amount to a political danger. The discontent would be confined to consumers, and they would have little or no sympathy from the outside public, who hold the consumers in disrepute.

It is quite probable in some cases, that the prohibition would be followed by recourse to other stimulants.

37, 38 and 39. I do not know.

40. Bhang is prescribed by native physicians in some diseases. I have heard that ganja-smoking is also prescribed in cases of asthmatic fits, but I have no personal knowledge. Wild hemp plants are used for cattle disease.

41. I think the moderate use of bhang is beneficial as a digestive in some cases. I do not know if the other two drugs are in any way beneficial.

(b), (c) and (d) I do not know anything further.

I do not know what classes consume the drug.

42. I cannot say if the moderate use of any of these drugs is harmless, but I have seen many moderate consumers of bhang disclose no visible signs of injury to their system, though the habitual consumers of it have very often displayed what I consider to be temporary dullness.

43. Yes.

44. (a) to (g) I do not know.

(h) Yes.

45. (c) I have not seen bhang produce any such effect when habitually but moderately used.

(f) I should think, yes.

49. (a) Yes.

(b) Yes.

(c) I should be inclined to think, yes, but cannot say how.

68. Yes, almost all the shops that I have seen are made use of as a place for smoking ganja. I do not know if charas is also similarly smoked. In my opinion these shops should not be allowed to be used as a place for smoking ganja or charas, because I think that this contributes to the spread of the practice.

69. As far as I am aware, wishes of the people are not consulted, at least in the places that I know of. I think local public opinion ought to be consulted.

211. Evidence of SYED RIYAZ UDDIN QUAZI, Pleader, Bogra.

1. I occasionally visited the ganja tracts.

2. The flat ganja is locally known by the name of "chipti;" the round ganja by the name of "jessori koli," and the broken ganja by the name of "chur."

3. In Rajshahi and Bogra. It is abundant in alluvial soil.

4. It is known by the name of siddhi or bhang. No; the siddhi or bhang is of different species, though it belongs to the same genus as the ganja.

6. Scattered.

7. Yes.

(a) and (b) In tracts where the boundary lines of Bogra, Rajshahi and Dinajpur meet.

I am not in a position to say the exact extent.

8. There has been a gradual and considerable increase in the ganja cultivation. This is owing to the enormous profit this cultivation brings. The money-lenders advance large sums of money to the cultivators on condition that the cultivators should return the money and half the produce as interest; hence the increase.

10. No, the *bona fide* cultivators of the ganja belong to the agricultural class, but those who

advance money and profit by it do not belong to that class.

11 and 12. No.

13. The cultivation of ganja is restricted in the districts of Bogra, Dinajpur and Rajshahi. The cultivation is impossible in khar (as opposed to alluvial) land.

14. The ganja and charas are prepared in the ganja tracts. I know not to what extent.

15. The cultivated ganja is prepared in this province in the method described by Dr. Prain, and is used for smoking only. The wild plant bhang is used to a small extent for eating and drinking purposes. The lower order of people use the seeds of cultivated ganja for eating purposes.

16. The bhang is occasionally prepared by the people in their houses.

Not that I know of.

19. Yes.

20. In the ganja tracts 75 per cent. of the people are more or less addicted to ganja-smoking. The lower and poorer classes of people, the sanyasis and the bairagis, use the drug more frequently.

21. In this part of the country the chipti (flat ganja) is generally used for smoking, but the round one is preferred.

23. No.

24. Not more than 5 per cent.

25. The use of ganja is on the increase.

28. The habitual moderate consumer's average allowance per diem does not exceed half a tola, and does not cost more than two annas, but the excessive consumer can smoke one tola or even more.

29. Yes, occasionally; the object of mixing dhatura is to make it stronger and more effective where the consumer cannot afford to pay for the price of the larger quantity of ganja he would have otherwise required.

30. No.

31. Yes. It is not very easy to break off the habit. Yes, there is such tendency.

32. There is no social or religious custom prevalent in the district which make the consumption of these drugs necessary. The moderate use of ganja and bhang is said to be enjoined in the Hindu Tantras, but it is observed more in the breach.

33. The hemp-smokers are often hated. The public opinion (both social and religious) is against the practice. The use of the narcotics in excess, except for medicinal purposes, is held in disrepute, as the people addicted to these vices, render themselves useless to the society, become prey to the innumerable ailments, lose their mental activity, cultivate all the beastly propensities which the human mind may be subject to, and impoverish the family. There is no custom of worshipping the hemp plant prevalent in this part. It is not even heard of.

34. No, no serious privation.

35. Yes, it is feasible gradually. It cannot be done by one stroke. The only way to make it practicable is to gradually diminish the area under cultivation. If half of the area at present cultivated is only allowed to cultivate in the next year, and if there be an annual decrease of 10 per cent.

in the succeeding years, it may be fairly hoped that it would be feasible to prohibit the use of ganja to a great extent for intoxicating purposes. Care should also be taken to raise the market price by doubling the rate of the standard duty now in vogue. The drug does not grow in any other tract than those defined in my answer to question No. 7. And if strict vigilance is enforced in that tract, the illicit consumption will be rendered almost impossible. Of course, it would occasion a sort of discontent among the excessive consumers for some time, and will not last long. There are evidences in the jail records that the ganja-smokers, who are imprisoned for a considerable time, are not allowed to smoke ganja in the jail, and they do not feel much distress by it, and they actually give up the habit when they are released. The political danger is out of question. In some cases the prohibition may be followed by recourse to alcoholic stimulant known as toddy, but the proportion will not be significant.

36. Not that I know of.

40. Bhang is used by the kabirajes for medicinal purposes. The hemp is indigenously used for external application in itches, humours, etc.

41. The moderate use of bhang for a limited time is known to be digestive, but it is injurious, if continued for a length of time. The moderate occasional use of ganja (but not bhang) is said to have alleviated fatigue and given staying-power under severe exertion or exposure, but there is always a re-action and depression afterwards. As to (c), there is no medical opinion in its favour, but the ganja-smokers are heard to extol the drug in such a manner, which, I think, they are, as a rule, bound to do. The drug is never used for sale purposes mentioned in (a), (b), and (c), for we have never seen any one, who is not a ganja-smoker, to smoke ganja for those purposes, but the ganja-smokers are reported to have said that.

42. The occasional moderate use of the drug may be harmless, but to be temperate in these intoxicating drugs is next to impossible.

43. Yes.

44. Yes; according to the habitual ganja-smokers it is refreshing. The moderate use (by which I mean a chillum at a time) of ganja is not known to have produced any sort of visible intoxication in habitual consumers. It does not allay hunger, except when the man is insensible. It creates appetite for the time being, but it has bad after-effects, as dyspepsia, want of appetite, dysentery and other ailments akin to indigestion. The want of subsequent gratification certainly produces longing and uneasiness.

45 and 46. Yes; but, as I am not a medical man, I am not in a position to discuss the question in detail.

47 and 48. Yes, to a certain extent.

49. I know not whether it is used as aphrodisiac. It is said to be used by the prostitutes during their menses to prevent conception, and so it may produce impotence.

51, 52, and 53. The smoking of ganja excites anger, and, as such, does probably tempt the consumers to crime.

54. I know not whether criminals do actually stupefy their victims by the use of the drugs, but they may easily do if they like. Yes, complete stupefaction is possible by this drug even without admixture in a person not used to it, but serves the purpose better when mixed with dhatura.

62. Not necessarily, as there are no habitual consumers of this drug. The people use it occasionally for intoxicating and medicinal purposes.

69. Never. The local public opinion ought to be consulted, and due weight given to it.

212. *Evidence of* BABU PARAMESWAR DAN, *Kshetrya, Pleader, Judge's Court, Vice-Chairman, District Board, Dinajpur.*

1. Informations received from persons who deal with hemp drugs and use them.

2. These definitions may be accepted for the province, but round ganja, otherwise called gol ganja, is not produced in the Rajshahi Division. It was previously imported from Jessore, but it is not now in use in Dinajpur. The other two classes known as flat or chipti ganja and chur ganja are in use in this district, and they are imported principally from Baubhora, a place in Naogaon sub-division of Boalia.

3. Hemp plants grow spontaneously in Boalia, Bogra and Dinajpur. They are abundant in all these three districts.

4. The ordinary hemp plants are known by the name of "Bhanger gachh," while the plants from which ganja is produced are called "Ganjar gachh." These plants are not the same, although they belong to the same species.

5. The wild hemp grows abundantly on river sides and in damp and moist soil.

6. The growth is ordinarily dense.

7. Hemp plants are grown for production of ganja and charas in Boalia, Bogra and Dinajpur. They are not grown for production of bhang only, or for fibres or seeds. They are grown in Bogra, Boalia, and in a small tract of Dinajpur in Thana Mahadebpur.

8. Not known.

10. They do not form a special class, but are ordinary agricultural cultivators.

11. Plants are cultivated for the production of ganja, but they are not raised from the seed of the wild plant.

13. It is not restricted to this province alone; it is grown in other provinces. But its cultivation is not common to all districts, as these plants do not grow in hard soil.

14. Ganja, charas and bhang are prepared in Boalia, Bogra, and in a small part of Dinajpur.

16. Bhang is generally prepared by the people in their houses. Can be prepared from hemp plant wherever grown. Ganja and charas are not prepared from wild plants.

17. By ordinary cultivators these drugs are prepared.

18. Yes; they do. They lose their narcotic power in time.

19. So far as my knowledge goes, I know ganja and charas are used only for smoking.

20. Low class people smoke ganja and charas. Few people in the mufassal smoke, but the number is large in towns. In the town of Dinajpur there are many ganja-smokers.

21. Chur ganja is not a special preparation, but these consist of small bits obtained from round and flat ganja. In the district of Dinajpur flat and chur are used.

22 and 23. Not known.

24. All classes of people from the highest to the lowest drink bhang, and everywhere in the district.

28. (a) One pice worth of ganja is sufficient.

(b) For habitual excessive consumers one anna worth.

29. Ordinary dry tobacco leaves are mixed with ganja by the labouring classes. I am not aware if dhatura is used. Dry tobacco is mixed to soften it, but dhatura is sometimes used with bhang to make it stronger. Bhang massala consists of black pepper and aniseed generally, but sometimes rose water, milk and sugar are used to make it palatable.

30. (a) Not known.

(b) It is confined to the male sex and adults mainly. It is not usual with children.

31. Habit of consuming ganja is easily formed. Moderate use of ganja develops into excessive.

32. On the last day of the Durga Puja, bhang is used by almost all who worship the image of Durga. This custom is regarded as religious. Siddhi, as its name implies, is considered auspicious when one goes to a distant place. Its use on such occasion is temperate. It is neither injurious nor bad to the formation of a habit.

33. (a) and (b) Consumption of ganja is generally considered as hateful and disreputable. The smokers generally go by the name of ganja-khor, a term used in contempt. This sentiment is attributable to its non-use by the higher classes.

(c) Not known.

34. Ganja-smokers would feel it a serious privation if they are to forego the consumption, because they contract a habit and feel refreshed by smoking.

35. It is not feasible to prohibit the use of ganja. Its prohibition would occasion discontent, but would not amount to a political danger. Its prohibition would be followed by recourse to alcoholic and other drugs.

36. To a limited extent alcohol is substituted for ganja.

37 to 39. Not known.

40. Kabirajes prescribe bhang for acidity and indigestion. Bhang is also used in treatment of cattle disease.

41. Their moderate use is not beneficial. By this I mean that their use by a man of healthy constitution is not beneficial. But the use of bhang by a dyspeptic is digestive. Use of ganja alleviates fatigue. It is also used as a preventive in malarious and unhealthy tracts. Labouring classes, more specially palki-bearers, use ganja for the purposes described in (b) and (c).

42. I don't consider moderate use ever to be harmless. It makes the consumer peevish.

43. Moderate consumers are no doubt inoffensive.

44. It is refreshing. Ganja and charas produce intoxication. Bhang also produces intoxication, if taken in large doses.

45. (a) and (b) Use of ganja and charas produces noxious effect, physical and mental, and impairs the constitution.

(d) and (e) Use of ganja causes dysentery if

the consumers do not get proper diet. It induces laziness.

(f) It deadens the intellect and produces insanity. I do not know what type of insanity is produced, and whether it is temporary or permanent.

(g) Not known.

47. It is not a hereditary habit.

48. I am unable to answer the remaining questions.

213. *Evidence* of BABU UMA KANTA GHATAK, Brahmin, Government Pleader, Bogra.*

12. I have heard that ganja is cultivated in the Bogra, Rajshahi and Dinajpur districts.

14. Ganja is produced in the jurisdiction of Thana Adamdighi. Bhang is produced in the eastern part of Bogra. Charas is not prepared.

19. As far as I know, ganja is smoked. I do not know how charas is used. Ganja is said to be used for medicinal purposes.

20. Sanyasis, baishnavas and low-caste people smoke ganja.

24. I have seen some Uriyas eating bhang.

30. I have seen five or seven persons smoke ganja in company.

33. Sanyasis are respected by people. Low-caste people are not respected.

* Translation.

35. The prohibition of the use of ganja is likely to create discontent among the smokers.

58. It is not working well.

62. The plant grows wild.

65. Taxation would not be unreasonable.

66. It should be according to price.

67. The producers of ganja, charas and bhang should be taxed.

68. There are separate houses.

69. People are not known to be consulted by Government. It is absolutely necessary that they should be consulted.

214. *Evidence of PUNDIT RAKHAL CHUNDER TEWARY, Brahmin, Pleader and Honorary Magistrate, Diamond Harbour, 24-Parganas.*

1. From personal experience and enquiries.

2. Yes, by the above names.

3. In the districts of Nadia, Jessore, 24-Parganas and Rajshahi.

4. It is known by the names of ganja, bhang or siddhi, and charas. Ganja is of three different kinds, round, chur and flat.

5. In ordinary fertile sandy countries or lands. It is generally reared in winter season.

6. The growth of siddhi is dense where it grows, and that of ganja scattered.

7. No.

8. No reason can be assigned for it, inasmuch as no regular cultivation of it is in existence in this district.

9. Not known.

10. No, they are of the same classes as of the other agricultural cultivators.

11. Not known.

12. No.

13. Yes, in almost all the districts, except Rajshahi.

14. No.

15. Not known in this district.

16. (a) No.

(b) Yes.

(c) Yes.

17. Lower classes of people.

18. Yes, these drugs deteriorate by keeping and

quite lose their effect in time. They keep good not more than two years. They lose their intoxicating power when they become old. As far as I know, there are no such preventive measures.

19. Yes.

20. Low, agricultural, labouring classes, boatmen, palankeen-bearers, jogis, fakirs, small numbers among gentries, and women among prostitutes and lower class. One-fifth of the total male population among low, agricultural, etc., classes; fifteen in one thousand among gentry; and ten in one thousand prostitutes and low classes of people. In almost all districts.

21. Round is preferred by the ganja-smokers.

22. In Gorakhpur. The use of charas is not so much prevalent in this district.

23. No.

24. Siddhi or bhang is used by almost all classes of people, specially in Orissa and up-country.

25. Rather decreasing.

26. *Vide* No. 20. One-fourteenth of the whole of the ganja-smokers are moderate, and the rest excessive.

27. Mainly from lower agricultural, etc., people and religious mendicants.

28. On an average sixteen persons may consume one seer of ganja per month. With regard to religious mendicants it is quite different. They may in a day consume eight annas worth ganja, that is, two kachas in weight.

29. Nothing is mixed with ganja and charas. Dhatura is sometimes mixed with bhang or

siddhi to make it more strong. I do not know of any preparation such as bhang massala.

30. They are almost always practised in company, and, when among rishis and fakirs, two to four kachas of ganja are consumed, and otherwise one or half anna weight. Bhang, four chatacks, when in company, and, in solitude, one piee worth, in weight one tola. The use of charas is not so prevalent here. The children amongst low classes scarcely use ganja or charas; but sometimes bhang is used for medicinal purposes among all classes.

31. Yes, among low, labouring, etc., classes, it is difficult to break off altogether. No, it is always the same, except in a few rare cases.

32. Many people use ganja and bhang to concentrate their minds to devotion, and that is generally among rishis and fakirs. On the Hindu festival day of Sivaratri almost all the people who are followers of Siva, specially up-country men, use ganja and bhang, as it is regarded essential. Temperate, and in rare cases excessive. Not injurious.

33. When among rishis and fakirs, it is regarded as religious, and in other cases otherwise. Yes, disrepute. The people who use it generally become headstrong. The worshipping of ganja and bhang is prevalent, but nothing is known about hemp plant.

34. Yes, especially to those who use it habitually, as it may bring diseases; and also the low and labouring classes will not be able to labour as hard as they do, the drug being stimulant to them.

35. The use of charas may be restricted, but not ganja and bhang. Yes, very difficult to enforce prohibition. Yes, there would be serious discontent, though no political danger. No other alcoholic stimulants would do.

36. Yes, liquor is being used among well-to-do classes. Yes, because it is not considered disreputable.

37. Yes, charas has not the same powers of stimulation as the ganja and bhang have.

38. No.

39. The drinking or eating of any preparation of hemp plant is not known, but only bhang is drunk.

40. (a) Yes, bhang only.

(b) Yes.

41. Yes, it is generally known as "turitananda."

(a) Yes, digestive.

(b) and (c) Yes.

(d) Not known.

Respectable class of people use bhang as a preventive for looseness of stomach, and in small quantity in the last day of Durga Puja. Amongst low and other classes the use of both ganja and bhang is almost always habitual and in most cases in moderate quantity.

42. Yes; it is harmless. It is used to prevent exposure by the religious mendicants who resort to it for concentrating their mind to God. The lower class of people are known also to use it for the bad purpose, as well as to enable them to work hard.

43. Yes.

44. Yes, it is refreshing. Yes, it produces intoxication but not so much as in the use of liquor.

Yes, it allays hunger. Its after-effect is said to be uneasiness and indolence. The effect of ganja continues for two or three hours; bhang, seven or eight hours.

45. (a) The habitual moderate use of these drugs, except charas, is known to produce physical, mental or moral effect, whenever the persons using them are in need of any of the effects

(b) to (e) No.

(f) No, when used in moderate quantity. I have not come across with such an instance, but some insane persons are found to have recourse to ganja-smoking, but no cause is traceable of their being attacked with the disease.

46. No answer necessary.

47. No.

48. Not necessary.

49. Yes, it is used by prostitutes. It does not tend to produce impotency, rather excites the passion.

50. *Vide* answer in question No. 45.

51. No. No connection with crime.

52. No answer is necessary.

53. No. The use of these drugs are known to be not so intoxicating as to lead people to a premeditated crime as in the use of liquor.

54 and 55. No.

56. When used in moderate quantity it gives additional strength to labour hard; it increases appetite, etc.; and when in excess, makes a man idle and makes him head-strong. With ganja no admixture is made. Dhatura is sometimes used with bhang to make it more stimulant.

57. I have not ever heard that ganja and charas are eaten or drunk.

58. Working well, but some changes with regard to price as well as its penalties must be considered to meet the requirements of the people.

59. The use of liquor should be prohibited, as its use is against the principles of Hindu and Muhammadan Laws. Ganja and siddhi and charas are not restricted by the Shastras. The price of it, if lowered by decreasing its duty, will be beneficial to the lower classes of men, as well as some members of the respectable men who are accustomed to it. The use of liquor by respectable rich old families has brought ruin on themselves, and also brought on untimely death. The above statement is given from my long personal experience.

60. Yes, sufficiently controlled.

61. No modification necessary. It is sufficiently controlled.

62. No further control is necessary.

63 and 64. No.

65. No. Some decrease in duty as well as price of these drugs is very desirable.

66. There may be no objection if uniform rates of duty be imposed on the three different kinds of ganja, but decrease of price and its penalties are indispensably necessary.

67. Yes. I have already recorded my suggestions.

68. There are shops, but no houses or premises for their consumption. The present system is working well.

69. Yes, when necessary.

70. There are no facts regarding the importation or smuggling of hemp drugs from Native States. Yes, duty is paid. There is no general use of untaxed drugs.

215. *Evidence of BABU SASADHAR ROY, Brahmin, Pleader and Honorary Magistrate, Rajshahi.*

1. I have been asked by the Rajshahi Association to answer these questions, and I proceed to do so below.

I am not myself a ganja-consumer of any kind, so I have no personal experience of the drug. But I have come in contact with many ganja and bhang-consumers, and so possess some information regarding these drugs. As regards charas I have no experience.

10. They are of the same classes as the other agricultural cultivators.

11. Not so far as I know in the districts of Rajshahi and Pabna.

13. There would be no part of the country, I believe, except any marshy lands, where its cultivation would be impossible.

14. Ganja and bhang are prepared, but not charas, so far as I know.

16. Yes; bhang is prepared generally by the people in their houses to be drunk as an infusion, or swallowed as a bolus, or eaten as cake. The leaves from which it is prepared are gathered from wild bhang plants, and used, both dried and green.

18. Yes; it does deteriorate by keeping, and lose its effects, so far as intoxication is concerned. But its medicinal use improves by keeping.

19. In this part of the country they are used only for smoking. I speak of Rajshahi and Pabna, so far as I know.

20. I omit charas from consideration. As regards "classes," I think ganja is smoked, more or less, by all classes of people. I should note that palki-bearers, cooks, (up-country) and Uriya domestic servants, some low class prostitutes who cannot pay for wine, and sanyasis or religious mendicants, many bhadrak of limited income, and very rarely bhadrak also of wealth (these last as a substitute for wine), artisans or handicraftsmen are consumers, more or less, of ganja and bhang.

As regards proportion, I believe, about 5 per cent. smoke ganja. The proportion for charas I cannot say, but believe to be exceedingly small. The smoking is principally done in residence houses, not in any public shops, where only a very small number of purchasers smoke.

21. I have heard that "flat" is preferred.

23. Bhang is not so used.

24. As regards classes, I refer to my answer 20. As to proportion, bhang is not habitually eaten or drunk in Rajshahi or Pabna, and, I believe, in the other districts of Lower Bengal. So the proportion cannot be given for such. But I can only say that I believe occasional eaters or drinkers of bhang will be about 25 per cent. here. This includes in many cases the ganja-smokers as well. Bhang is also used in residence houses, for it is seldom purchased for luxury.

25. I believe the use of ganja and bhang to be stationary. It is, I should say, not on the increase. But as to charas, I believe its use is decreasing. The reason appears to me to be that they are not considered to be fashionable intoxicants. A certain amount of disrepute also attaches to ganja and charas, in regard to which public opinion is growing stronger now than before.

26. As to ganja, of the 5 per cent. I have stated in answer 20, the major portions are habitual moderate consumers. As to bhang, I believe the

25 per cent. I have given in answer 24 are all occasional moderate consumers.

I cannot give the proportion asked.

27. The principal circumstance is association with consumers. Hard workers of the classes mentioned in answer 20 take to ganja to relieve fatigue; bhadrak for pleasure, including sexual indulgence. Bhang is taken mostly on ceremonial occasions, sometimes for pleasure and in some cases for medicinal purposes.

28. I speak of ganja here. So far as I know, half an anna to one anna per diem for class (a).

29. With bhang the ordinary "massala" is mixed, also milk, curdled milk, etc. With ganja tobacco is sometimes mixed. Dhatura is given to add to its intoxicating power. I should say, in this part of the country, no special preparation is sold by the shop-keepers. It is the ordinary garam massala of the country.

30. To a large extent, the practice begins in company, but is afterwards indulged in solitude. Ganja is mainly confined to the male sex. Bhang is sometimes taken also by public women. I certainly think that the practice is very rare in women in this part of the country. Children sometimes take bhang. In this answer I have excluded charas from consideration; for it is not practised to any appreciable extent.

31. Yes; the habit is easily formed, so far as ganja and bhang are concerned. But as I have already said habitual bhang-taking is unknown here. Ganja habit, if once formed, is, I should say, difficult to break off. There is not much tendency (so far as ganja and bhang are concerned) towards excessive use.

32. I must very strongly assure the Commission that in this part of the country there is no custom, social or religious, regarding the consumption of these drugs. The fact (for it is a fact) that they are sometimes consumed at ceremonials or Puja occasions, such as Bijaya Dashami, Kalipuja, Siva Chaturdashi, or the fact that sanyasis and the religious mendicants consume them, are no grounds for saying that there is any custom such as here suggested. Such use at ceremonials or Puja occasions is decreasing beyond doubt. Consumption on such occasions is never regarded as essential, or even necessary. It is very generally temperate. It does not at all lead to the formation of any habit, though it is certainly theoretically "likely" to do so. It is not at all injurious. Except the first sentence the rest relates to ganja and bhang only.

33. It is regarded unfavourably. Yes, there is public opinion, but entirely social, not at all religious. The public opinion in regard to ganja is that smokers of it are considered low and irritable or inconsiderate. This disrepute is due among other reasons to: (1) it is no longer a fashionable intoxicant; (2) consumers mostly being not middle or higher class people; (3) consumers generally being very irritable. The word "ganja-smoker" (ganja-khor) has come to mean inconsiderate and rough.

There is no custom here of worshipping the hemp plant.

34. It surely will be a serious privation to consumers to forego ganja-smoking, if the habit has

been formed. Taking the adult male population to be two crores in Bengal, I should say the number of consumers will be somewhere about ten lakhs.

35. In case of prohibition it will be very difficult, I believe, to prevent illicit consumption, which will in all likelihood follow in not a few instances. Prohibition will produce great dissatisfaction among the consumers, but it will not be "serious." Such dissatisfaction or discontent will certainly not amount to a political danger. I believe the prohibition in many cases will be followed by recourse to alcoholic stimulants.

36. There is reason to think so. Alcohol is being substituted more or less for other drugs. The cause for this change is principally imitation of European habits. Alcohol is fashionable and is considered a civilized intoxicant.

39. I say of ganja: smoking certainly is less injurious, especially hukka smoking. The reason obviously is that some injurious principles are burnt away and eliminated. In eating, the whole drug is swallowed.

40. Yes, bhang is given by the kabiraj in diarrhoea, dysentery and other bowel complaints; ganja in cholera cases sometimes, and also in asthma and bronchitis. I don't know that any of them are given in cattle disease. I have omitted charas from consideration.

41. I omit charas from consideration.

(a) They are; as a food accessory but not as a digestive; and they are so, only in the first stages of consumption before one forms the habit. After that they impair digestion.

(b) They are beneficial in the way stated in the question; but only for the time being.

(c) I do not know, and I have never heard of that before; though I fully expect I should have heard so from people, if that were a fact. As regards (b), the cooks, domestic servants, and paliki-bearers or load-carriers, handicraftsmen, are the people I have in mind.

I have had in view only the case of moderate occasional consumers.

42. Of course, it is too much to say harmless of any intoxicating drug; but I certainly think that ganja or bhang consumption, if moderate, does not produce any appreciable harm from any point of view here relevant. Because moderate consumers, as I have said, do not generally develop into excessive consumers, nor do they neglect their own legitimate work; nor in the vast majority of cases do they do much harm to their own body.

43. I should say they are inoffensive to their neighbours in most cases. They get an irritable temper as they advance in the habit; but they

are seldom found to molest or annoy their neighbours, or commit any violent crimes in regard to them.

44. I omit charas from consideration. Yes, the immediate effect is to some extent refreshing. It does not produce much intoxication on habitual consumers. It seems to allay hunger and appears to create appetite. But I don't believe these apparent feelings are real. I think they are more imaginary. Bhang intoxication lasts even for 24 hours and has bad after-effects. It dries the body and constipates the bowels. Yes, the want stated does produce longing and uneasiness.

45. I omit charas from consideration. Habitual moderate use does not produce any moral noxious effect, so far as I am aware. But as regards mental and physical, it does produce such effect in the long run. It dries the constitution, injures digestion in many cases in the long run. After very many years of habit, the moderate consumers at the end get dysentery, bronchitis or asthma. I do not find that it impairs the moral sense, induces laziness, or habits of immorality or debauchery.

It is believed (in the case of ganja) to produce insanity in the long run, even if the use is not excessive. It produces temporary insanity; at any rate, the common belief, so far as I am aware, is so; but cases of permanent insanity have been reported to me. They are very few.

47. It does not appear to be a hereditary habit, or to affect the children of the moderate consumer.

51. I don't believe that it has any connection with crime in general or with any special crime. Only it now and then leads to cases of assault and hurt. There was only one case of murder to my information. It was in Nator Thana jurisdiction in the district of Rajshahi. The assault or hurt cases are extremely small.

55. I have heard now and then that such stupefaction is induced, but very likely the drug must have been mixed with some more powerful intoxicant, such as dhatura, etc.

62. So far as bhang is concerned, I don't think so.

68. Such shops, if any, should not be tolerated for one moment.

69. Yes, local public opinion should be considered.

I must close by saying that I am neither ganja, bhang nor charas consumer, nor do I believe that I have any reason to be biased in my opinion. But I am certainly of opinion that if it were a question of votes, I should vote against ganja or bhang suppression. But as to charas, I think it will be very much better if that is suppressed.

216. Evidence of BABU JADUNATH KANJILAL, Brahmin, Pleader, Judge's Court, Hughli.

1. Special enquiry and general information on the subject are sources of my knowledge.

2. Properly speaking, only three narcotic articles are obtained from hemp, to wit, siddhi or bhang, charas and ganja. But they are not the only articles used. Oil is extracted from hemp seeds, and is used as other oil. Boiled hemp seeds are also eaten by the poor. Siddhi or bhang is also used in the shape of majun. In this case the

resinous matter is extracted from siddhi and is used with sugar and milk. I would therefore classify the use of hemp in this way: (1) ganja, (2) charas, (3) siddhi or bhang, (4) majun, (5) hemp seed, (6) hemp seed oil. The first four have intoxicating effect. It is doubtful whether the last two have any such effect.

3. I saw bhang plants growing in several places of Khulna. My belief is that they can be seen

Growing spontaneously in several places of Bengal. Hemp abundantly grows in Kashmir.

4. I know of five names usually applied to hemp plants, namely :—(1) ganja, (2) siddhi, (3) bhang, (4) patti, (5) subji. I cannot say whether they refer to the same plant.

5. Hemp is likely to grow abundantly at a height of from 4,000 feet to 7,000 feet above the sea-level. It grows well in places near the Himalaya and in Kashmir. I believe the ground, which has less sand in it, is favourable to the growth of the plant.

6. I believe the growth of the wild hemp is not ordinarily dense but scattered.

7. Yes. The precise places and extent cannot be accurately given.

9. In the plains, the seeds are sown in August or September. In the Himalayan tracts, the seeds are sown towards the end of May or the beginning of June. The plants are cut in October or November. A space of three to four inches is kept between the plants. Manure helps the abundant growth of the plant. The male plants are cut one month earlier than the female plants.

10. No, they do not form a special class. They are of the same classes as other agricultural cultivators.

11. Partly by the one method and partly by the other.

The plants grow well at a height from 4,000 feet to 7,000 feet above the sea-level and in the Himalayan tracts. I believe that it would not grow well in places near the sea, where the earth is mostly composed of sand.

14. Yes The precise area and extent cannot be accurately given.

15. As to the preparation of ganja, I cannot say more than what is contained in the second question. Charas is the name given to the resinous matter that comes out from hemp plants. In the Himalayan tracts, the matter comes out from the leaves in the hot season. In the plains, the little branches and the flowers as yet in their buds are dipped in spirit or ether, and thereby the matter is extracted. The matter is also extracted from the ovary. The ganja and charas are used in smoking. The ganja with a little quantity of tobacco leaves is pressed in the palm of the left hand by the right hand finger and then put in a kalki and then smoked. As regards charas, some ten or fifteen drops of undried charas or ten to fifteen grains of powdered charas are mixed with ordinary tobacco and then used in smoking. As to bhang, the dried leaves are washed well in the first instance, and then they are ground with mouri. It is then mixed with water and then drunk. Sometimes sugar, rose-water, rose-flower powder and golmarich are mixed with the same. Majum is made of bhang. The leaves of the bhang plant are mixed with ghee and then boiled with water. A resinous matter comes out from the leaves, which being mixed with milk and sugar is put on the fire. When cooled, the mixture becomes dry and hard. It is then cut into pieces and then used for eating.

16. The first two questions are answered in the affirmative. I am unable to answer the third question. I see no reason why ganja or charas cannot be so prepared.

17. By the agricultural class of the people.

18. Yes, they deteriorate by keeping. Exposure to weather makes them deteriorate. In time they lose their stringent properties. Though they do not become absolutely useless in time, they are little valued by those who are accustomed in using them. Ganja and bhang, if kept quite tight and compact in a house so as not to be exposed to the weather, and if occasionally spread before the rays of the sun so that they cannot deteriorate by damp weather, may be thereby protected from deterioration.

19. As far as I know, ganja and charas are used only for smoking. Of course, there are other uses to which they are put for medicinal purposes.

20. It is the lower class of the people who smoke ganja and charas; the higher class seldom do so. The fakirs, sanyasis, dandis, and other mendicants, and the idle class of the people largely smoke ganja and charas. Professional singers and musicians do also smoke ganja. These men are to be met with almost in every part of the country. Their number is no doubt small compared with the general population of the country.

21. The flat ganja is not so intoxicating as the round, and the chur is more intoxicating than the round or rolled ganja. The beginner first practises with the flat and then with the round and ultimately with the chur. The chur is preferred to the rest. I know not whether different kinds are used in different places.

22. It is the native charas that is chiefly used as being cheaper. The charas that comes from Herat is prized very much. Foreign charas usually comes from Nepal, Thibet, Afghanistan, Bokhara and Herat.

23. I do not know whether bhang is used for smoking.

24. I have already said, in answering question No. 15, that majum is prepared out of bhang. It is eaten. In other cases bhang is drunk. Majum is used, *i.e.*, bhang is eaten by those who, like the ganja and charas smokers, are fond of intoxication. Men who would not like to be known as ganja-smokers would ordinarily drink bhang. The Saiyas, *i.e.*, the worshippers of Siva, generally drink bhang. At the time of the Bijaya ceremony, bhang or siddhi is used by almost all the Hindus. Those, who do not like to drink, touch it by their lips. Those who are ganja or charas smokers would feel no scruple in drinking bhang.

25. The use of bhang is on the decrease. There was a time when its use in Bengal was almost universal. It was invariably used by all Hindus at the time of the Bijaya ceremony. English education and the consequent disregard to national prejudices have considerably checked the use of bhang among the educated and enlightened class of the people. The use of ganja and charas is on the increase. In Bengal, however, it is not so. The price of opium and liquors being raised, those who were in the habit of using them have given it up and had recourse to ganja as an alternative. Many people of Assam, Central Provinces and Burma are actually doing so. Habit once formed is not and cannot be given up soon. If there is difficulty in one direction, convenience and opportunities will be sought for in another.

26. It is not for any absolute physical necessity that the habit is incurred. Unlike the use of opium, ganja and charas are used for their

intoxicating effect which is believed to give pleasure. Therefore the largest number in my opinion are (b) habitual excessive consumers. The next are (a) habitual moderate consumers, who for want of money are unable to indulge in excess. Then come those who may be called (d) occasional excessive consumers. Lastly may be mentioned those who are called (c) occasional moderate consumers. In the case of bhang, the order is otherwise, being (c) first, and then (a), (d) and (b), respectively.

27. (a) Are generally boatmen, fishermen, and other low classes following particular calling.

(b) Are generally fakirs, sanyasis, and other religious mendicants, as also those who incur the habit for the sake of intoxication. Also singers and musicians.

28. (a) From two pice to four pice.

(b) From four pice to ten pice.

29. (a) Milk, sugar, mouri, golmarich are mixed with bhang or siddhi.

(b) Ganja and charas are sometimes dipped in spirit and then made dry again. Dhatura is also used by veteran smokers.

30. Ganja and charas are consumed in smoking usually in company. Not so is the case with bhang. Habitual consumers generally smoke in company. The consumption is mainly confined to male adults. Women known as Bhairabis generally smoke ganja or charas. It is not usual for children to consume any of the three drugs. The boys of boatmen, fishermen and the young mendicants are often seen smoking ganja.

31. No, the habit is not easily formed; but once formed, it is difficult to give it up. Those who once form the habit are seldom seen to give it up. The reason is not that it is impossible to be given up, but because those form the habit do not seriously think to be got rid of it. No healthy influence is brought to bear on them. My belief is that even habitual consumers may give up the habit, if they choose to do so. Prisoners in jail get on well without the drugs, showing thereby that the use may be dispensed with without affecting the health and without any difficulty. The last question is answered in the affirmative.

32. The only custom I am aware of, in which bhang or siddhi is used, is on the occasion of the Bijaya, when it is considered essential for every Hindu to drink or touch the drug. It is not so considered by the enlightened class. The custom probably arose from the meaning of the word siddhi (success). The use on the occasion is temperate. Yes, it is likely in some cases to lead to the formation of the habit. The use is injurious.

33. The consumers of any of these drugs (with the exception of persons occasionally taking siddhi or bhang) are generally treated with contempt in society. They are generally considered as untrustworthy, incompetent to manage any business through lazy habits which the practice is believed to engender. Those who use the drugs are found to be worthless, hence the consumers are treated with contempt. I am not aware of any custom of worshipping the hemp plant.

34. The discontinuance of the use of the ganja may be regarded as a privation to the houseless religious mendicants, who believe that they overcome hunger and bad weather, as well as all melancholy thoughts, by the use of the ganja. They are lost to the society, and anything which

makes them the more so is welcome by them. The discontinuance would not be a privation to any others, but would be a blessing, as it would make them more economic, active and careful about their family.

35. Yes, it is desirable that the use of the drugs be put a stop to. This can be done by prohibiting the cultivation of hemp and destroying it wherever it grows spontaneously, as also prohibiting foreign imports. All illicit consumptions may be prevented by a strict vigilance and enforcement of the Excise Law, prohibiting the use of any of the drugs except for medicinal purposes. The prohibition can be enforced in the same way as the law as to the offering to sale or having in possession any unwholesome food or drink is enforced. There would be no doubt discontent in the minds of the consumers, but that would not be serious, nor would there be any political danger. The consumers have very little position in society, and are conscious of their guilt. They would not fail to perceive the noble intention of the Government. Yes, the prohibition would be followed by recourse to (a) alcoholic stimulants or (b) to the use of tobacco or opium. In the majority of cases, the use of tobacco smoking to excess would be resorted to.

36. No; alcohol would not be substituted for the drugs, unless the price would be cheaper. At present the drugs can be had at a cheaper price than alcohol.

37. Yes, ganja smoking produces a deeper and longer intoxication than charas smoking. The former lasts for hours and hours together, the latter for an hour or two. Sometimes charas smoking is resorted to to do away with the effect of the ganja smoking. The effect of the former is more sudden than that of the latter. In the case of charas, the consumer gets sometimes insensible while smoking, but he recovers earlier than the ganja smokers.

38. Yes, the effects are different in degree. The chur is the most intoxicating of the three, and the round or rolled ganja is more intoxicating than the flat ganja. The flat ganja is not much valued by habitual consumers.

39. Ganja or charas smoking is more injurious than siddhi drinking. But the latter becomes equally injurious if indulged in excess. The intoxicating effect of bhang lasts from twelve to fourteen hours and sometimes for no less than twenty-four hours. In my opinion smoking is more injurious than either eating or drinking, as in the former case the head is affected more suddenly than in the latter.

40. I am not in a position to answer this question. I have heard, however, that the drugs are used for medicinal purposes. I do not know whether they are used in the treatment of cattle disease.

41. (a) It is believed by some that siddhi sharpens appetite and also digests food. Some men drink siddhi in moderate quantity, so as to be able to eat much in a feast. I do not believe that siddhi or the other drugs have any such effect.

(b) The drugs do not give staying-power under severe exertion. Ganja smoking appears to produce beneficial effect in the case of those who are constantly exposed to the weather, such as fishermen and religious mendicants. Moderate occasional use may do good to the former and moderate habitual use to the latter. The use of the

drugs in a moderate degree may alleviate fatigue by bringing on sleep and insensibility but with bad after-effect.

(c) I believe not. There are different opinions on the point. Ganja smokers are generally of weak constitution.

42. I do not consider the moderate use of any of the three drugs harmless, specially in the case of those who are engaged in the intellectual pursuit of life. Those who wish to have their head cool and hands steady should not use any of the drugs. The use may be harmless, nay necessary in the case of those who would otherwise catch cold by exposure. In such cases the use may be regarded in the same light as the use of any medicine.

43. No; such consumers are generally found to be angry-tempered men. They are suddenly provoked. They annoy their neighbours by their misconduct. They have generally thievish habits.

44. The habitual consumer feels refreshed by the use of the drugs. Slight intoxication takes place, which does not deprive him of his senses. The use of ganja seems to allay hunger. The use of bhang in a moderate quantity is said to create appetite. In the case of charas, the effect lasts from one to two hours. In the case of ganja, the effect lasts a longer time. In the case of siddhi, the effect lasts usually for twelve or fourteen hours, sometimes for twenty-four hours. I know the instance of a moderate habitual consumer of ganja who could work without taking any food in the day time, but he would talk much and would seem to be of an irritating disposition. He is no better than a mad man and is very whimsical.

45. Yes, it produces bad effects. Yes, it does impair the constitution. It impairs the nervous system. It causes loss of appetite. So far as I know, it causes asthma. It impairs the moral sense materially and induces laziness and habits of immorality and debauchery. It deadens the intellect and produces insanity. The insanity so produced is generally of a temporary character, curable by abstinence, and is likely to be re-induced by the use of the drugs. It is only habitual excessive consumers and sometimes also habitual moderate consumers who are attacked with insanity. All bad results overtake them. Unless thoroughly reformed, the ganja smoker seldom finds fault with his habit and does not make any sort of confession. It is doubtful whether moderate use of the drugs in the case of persons not suffering from mental anxiety or brain disease can bring on insanity. Such a constitution may stand the effects of the habit. But in a person who is suffering from mental anxiety or brain disease the habit is highly injurious and ends in bringing on insanity. Such men are usually prone to indulge in excess. There are instances of men deficient in intellect, who are induced by somebody else to the habit. In course of time the habit is formed. It is no longer kept in due bounds, and the ultimate result is insanity or half-insanity. Precisely is the case with those suffering from any mental anxiety.

46. Habitual excessive use of any of the three drugs is certainly injurious to health. It tells heavily on the intellect and the moral power. The nervous system is deranged. Laziness and drowsiness are the result. Insanity is oftentimes

the fatal result.

47. It is not necessarily a hereditary habit. But the children of those who use those drugs are oftentimes corrupted by their examples. The sons of boatmen, fishermen, and the disciples of religious mendicants and singers often imbibe the habit.

48. See answer to question No. 47.

49 and 50. I know not whether it is so practised. Prostitutes who are ill-conditioned and who are visited by the low and vulgar class do some of them use the drugs for the purpose of intoxication, and not so much for any other. They cannot please their companions, unless they themselves practise the same habit as that of those who visit them. I do not think that the use of hemp produces impotence.

51. It is generally known that those who are habitual moderate consumers commit petty thefts. Those who are poor cannot afford to buy the drugs, ganja and charas. They are pick-pockets, and petty thieves. They lead such a life mostly for the sake of purchasing the drugs.

52. Those who indulge in excess commit thefts, robberies and dacoity. They cannot earn their bread or the drugs by the sweat of their brow, and consequently have generally recourse to those easier methods.

53. It is very likely that it does. I have not come across any such case.

54. Yes, most of them do so. Dacoits often do so. Murderers also do the same.

55. Such cases are very rare, so far as I know. I believe that complete stupefaction cannot be induced by the drugs without some admixture.

56. The effects caused by the admixture are well perceptible. Milk and sugar are sometimes mixed with siddhi to increase the intoxicating effect. Majum is prepared for the same purpose. Dhatura is seldom used as an admixture. Only veteran smokers do the same for personal consumption. It is used by designing men for administering to others, either for satisfying a grudge or to rob the helpless man of his property.

57. Ganja and charas are seldom eaten or drunk.

58. No; I am not acquainted with the present system of Excise Administration, nor am I in a position to say how the system is working.

59. No; I am not acquainted with the present system of Excise Administration, nor am I in a position to say how the system is working.

60 to 67. Unable to answer.

68. Yes. Exception is only taken when any of those houses or shops are in the vicinity of any school, or respectable neighbourhood. The shops or houses should be at a respectable distance from the houses of the residents of the locality as well as from all public institutions and bathing ghats, etc.

69. The wishes of the people are seldom considered. Most of the people do not know at all that they have any right to make any objection. They passively submit to what is done by the authorities, but they invariably regard such shops and houses as a nuisance. Yes, local public opinion ought to be considered.

70. None that I am aware of.

217. *Evidence of BABU BEPRODAS BANERJEE,* Brahman, Pleader, Newspaper Editor, and Chairman, Baraset Municipality.*

1. I have known lots of hemp and charas smokers; have seen Hindu and Musalman mendicants, religious ascetics, use ganja and siddhi; and have also seen ganja and siddhi used in temples.

2. Yes.

3. Ganja chiefly grows in Rajshahi. But since the duty has been enormously raised, ganja is clandestinely cultivated. Large jars (*jalas*) are filled with earth and planted. Ordinarily one plant is in one jar. One plant generally produces about three seers of ganja. The jars are kept on roofs, or on places where they cannot ordinarily be seen. These plants seldom give out charas or first class siddhi. Gorakhpur produces the best charas. But the use of charas has very much diminished in Bengal during the last thirty years.

4. Ganja is the generic name throughout India. Charas ditto. Siddhi called subji, patti, pata or bhang.

5. I cannot speak with any authority.

6. Scattered, so far as I am aware.

7. I know Rajshahi charas is not produced in Bengal proper.

8. Ganja cultivation is decreasing. As an industry it is not so profitable now. The cause is the enormous increase in the duty. Another cause is the dislike of the higher classes to use ganja. Fifty years ago they used to smoke it in large numbers. Now "ganja smoker" is a term of abuse. The same is the case with charas and siddhi. Majum is a preparation of bhang. It is an oblong-shaped sweetmeat. At present its use is confined solely to up-country men.

10. Ordinary cultivators.

11. Not ordinarily. All plants do not produce seeds which germinate. They reserve some plants for seeds. The flowers are not broken for use as ganja.

13. The Government have better information than I can give. The Collector of Rajshahi must be an authority in this matter. I have seen ganja plants in Jonoargunge in the district of Chittagong.

14. (a) Yes.

(b) No.

(c) Yes.

Largely in Rajshahi.

16. Ganja and bhang can be prepared everywhere, but not charas. This comes from Gorakhpur and Nepal. It seems to me that a rocky soil and cold climate are necessary to enable the plant to exude charas.

17. By cultivators. Majum is prepared by a class of confectioners who reside in large cities. Bara Bazar is the only place in this part of the country where majum is made.

18. I have asked pacca ganja smokers. They say that, if kept out of damp, these do not lose their properties at least for five years. Siddhi, they say, won't last for more than two years. The older the charas the greater is its flavor and strength. This is what the toppers say.

19. Ganja and charas are used only for smok-

ing. A sort of majum is prepared from ganja. Some opium (guli) smokers use ganja with semi-liquid opium. This they call "grape shot" on account of its intoxicating power. Its specific name is then "jashu."

20. As a rule the educated classes abstain from ganja and charas. The latter was formerly the intoxicant of the bhadroluk. At present few high class men use them; it is the lower classes who use them everywhere. Sadhus, both Hindus and Muhammadans, almost invariably use ganja and charas when they can afford to buy it (charas). Mehters, carriage drivers, khansamas, tailors, itinerant musicians, men connected with mosques and temples are ganja smokers. They are used in every part of India.

21. Round ganja is preferred in the North-West and flat in Bengal. But to smokers both kinds are welcome.

22. Gorakhpur and Nepal.

23. Very seldom. But, as a variety, it is smoked everywhere in India.

24. Bhang is seldom eaten. Punjab people eat it when they cannot powder it. It is drunk in every part of India. Sepoys are specially fond of it and daily use it. In all temples dedicated to Siva bhang *must* be used in drinking and pouring on the head of the idol. The Maharaja of Benares gives bhang for use in the temple of Bisheshwar.

25. Ganja and charas are certainly not now used as before, though this decrease has taken place amongst the higher classes. As regards the others, they are in as much demand as before. The only restriction is the high price. Formerly one pice worth of ganja was sufficient for twelve smokes. At present it is barely sufficient for one full smoke.

26. (a) Most men who use it.

(b) Spendthrifts and Musalman fakirs and Hindu sanyasis.

(c) Seldom any, as far as I am aware. A ganja smoker is a regular smoker.

(d) Spendthrifts and religious mendicants, etc.

27. Generally poor people undergoing hard labour. This is their only stimulant. Religious mendicants, who have often to live under trees, in jungles, on mountains, etc., exposed to all weathers, are of necessity ganja smokers. They say that a man can better contemplate God after a hearty smoke of ganja. Ganja smokers come from all classes of the people.

28. (a) Four smokes (chillums) a day.

(b) Twelve to twenty. This I gather from pacca smokers.

29. Tobacco leaf with ganja. Prepared tobacco with charas. Very seldom dhatura is mixed by religious mendicants, and that when it is too rainy or too cold. Bhang massala is not used in this part of the country. A preparation so called is given to horses when they do not drink water.

30. Children do not smoke ganja. The greatest smoker won't allow it. Very few women smoke

* Was invited to attend at a meeting of the Commission for oral examination, but failed to appear.

ganja; those that do are invariably prostitutes. Ganja smokers always prefer to smoke in company. Bhang is not much used by females, though some respectable women, specially Muhammadan, do take it; children seldom. The same is the case with charas. Charas and bhang are ordinarily used in company, though bhang is not unoften taken in solitude.

31. The habit is formed like drinking habit. Generally bad company is at the bottom. The habit can be easily given up and causes no illness or inconvenience, as in the case of those using opium.

Bhang and ganja are associated with the religious rites of the Hindus, as a visit to the temple of Tarkeshwar would satisfy any one. On the day the idol Durga is immersed, bhang is consumed, though many people merely dip their fingers in the bowl and put it on their tongues. The god Siva must be bathed with milk mixed with bhang or siddhi. Musalman fakirs consider it absolutely necessary to use ganja and bhang. As a matter of fact, most people use these in moderation. Their use does not injure health, nor lead to the commission of crimes as dreadful alcohol does. A ganja smoker and bhang drinker can more easily give up these than one accustomed to drink spirits.

33. Charas smoking is called "bhadrakalokar nesha" (luxury of the gentleman class). Ganja-khor is a term of reproach or ridicule. Yet these people are not socially degraded; on the contrary, ganja smokers are regarded as simple men who hate to speak falsehood, and are generally fair in their dealings with the world. Great songsters generally have a smoke before music. They consider it necessary to concentrate their energy. Society in one respect loves ganja and opium smokers for their drollery. Like Irish bulls, there are numberless stories regarding these men. The father of Sir Raja Radhakant Deb and Babu Durga Charan Mukerji of Bagh Bazar, Calcutta, used frequently to entertain these people. Durga Charan is reputed to have spent three lakhs upon them. The great Hindu god Siva, our first surgeon and physician, who was the first to introduce inductive philosophy in the world, was a ganja smoker; hence ganja is considered a thing necessary for ascetics. The hemp plant is not considered sacred.

34. Yes, it will be a serious privation to all religious men to cultivators, small traders—in short to all but a few educated men who have taken to drinking liquor. Siva was a ganja smoker. Abolish ganja, and I shall not be responsible for the peace of a hamlet. Hindu jogis, Muhammadan fakirs will proclaim throughout the land that the sarkar want to introduce English beer and Scotch and Irish whisky by abolishing ganja. The cry of "religion in danger" will be raised. There will be discontent and rebellion, in which all sects are sure to join. Remember that ganja is the only stimulant of the mass, and sanyasis and fakirs. Except the higher classes, the rest are given to use of ganja and siddhi. Of course the use of opium is far more extensive. In the sepoy army, ganja, siddhi and opium are extensively used. After a march these are used. The peasant, after hard toil, smokes ganja and drinks bhang. In Bengal bhang is less used. But ganja is, *par excellence*, the only solace of the poor. You may as well try to abolish the use of tea in Great Britain.

35. There will be illicit growth as it is now. High duty has already led to illicit manufacture of country liquors. The dealers sell these, else how can a Sonthal get drunk at the expense of half anna? There will be an increase in the consumption of liquor. Poor people will not be able to buy "regulation liquor." The police already shut their eyes to illicit manufacture of liquor. The evil will be universal. Revenue will suffer; and we will be a nation of drunkards, instead of being the most sober people in the world. The prohibition will be a political danger before which the greased cartridge agitation was child's play. Ganja is even now secretly cultivated. This evil will increase. The Russian Government, with all their police spies, etc., can't shut out objectionable literature. It will be insanity to hope that ganja, siddhi or opium can be abolished altogether. Stop these, dhatura, kuchila (strychnine), etc., will stand in their place.

36. No, they use these drugs, and will use them. Liquor is used as a luxury by those who can afford the expense. I have seen many people who, to get rid of opium, began to take liquor; but the result has been that they use both. Many toppers use opium to avoid the craving for wine. Some succeed; but the majority get addicted to both, though a man taking opium cannot drink to excess. Do not imagine that because a ganja smoker or opium eater or smoker takes wine he gives up these drugs. On the contrary, those that can afford the expense invariably smoke ganja after finishing their cups. They call this smoking chabuk (whip).

37. This song will be a good answer—

Ah! what a fine sensation wine creates!

The legs stagger, and methinks I fall.

Ganja smoking makes a man poor.

We get headache by smoking charas.

Red water in the belly makes the body unsteady.

Slip once, and you fall in the ditch.

Then the constables titter, and the Magistrate sends you to jail.

This is a satire against liquor.

The intoxication in both is almost the same. Charas sometimes produces headache. The intoxicating sensation comes a little after smoking, whereas in ganja it is instantaneous. Hence it is called "turitananda" (the instant pleasure giver). The great Akbar is said to have used this expression.

38. No, so far as my enquiries go. I never used these. But I have marked the effect on many and made inquiries of them.

39. There is difference in the sensation of drinking bhang and smoking it. The sensation comes gradually, specially in bhang drinking, whereas in ganja it is turitananda. This is well-known throughout the country.

40. Bhang is given to horses and horned cattle when sick. A preparation of ganja is used by kabirajes in asthma and some female diseases. Hakims occasionally use bhang and ganja. Horses of the best kind are given bhang even in European houses. Madak is a ball of the size of a big plum. It has bhang in it. It is a nerve tonic; has digestive properties. For old people it is highly beneficial. It is often used as aphrodisiac (kameshwar madak). As such it is superior to arsenic, strychnine, and even many preparations of iron. The habit of eating opium can go by taking these balls. It is one of the best medicines in our pharmacopoeia. Hakims also use bhang in this way.

41. Yes. Before a feast, you will see all ganja smokers having a pull. It gives appetite and is digestive too. Bhang is well-known for this effect. Many hawkers sell hajmi guli (digestive pills). It contains a little bhang, and is most extensively used. Mr. Forbes Mitchell in his *Reminiscences of the Mutiny*, speaks in raptures of a pill of opium after a terrible march in summer. The effect of opium is slow. But ganja or a cup of bhang works wonders on the sons of toil. A man works the more if he can have a smoke whilst working. The staying-power is great. Alcohol makes man lose control over his muscles; but opium, ganja, and bhang have a contrary effect.

As a preventive of diseases one has only to look at the sadhus, who have to remain on mountains, travel through jungles and marshes. Bhairavis (female ascetics) use ganja and bhang. People have a notion that these people possess wonderful medicines. Most medicines they give contain opium and bhang, though mercury is used too. In malarious places opium is extensively consumed. It is a remarkable fact that ganja smokers were free from attacks of fever when malaria appeared in Baraset, etc. In cases of diarrhoea bhang is used by all classes of the people and with effect. The higher classes do not ordinarily use ganja in unhealthy places, but bhang and opium are used by all, even by females. Of course bhang is taken occasionally, but charas and ganja are daily used.

42. "The immoderate use of amrita (nectar) leads to evil," says the great Siva. The reports of our lunatic asylums shew that 95 per cent. of insane people are ganja smokers. "Smoke ganja moderately and you may live for three hundred years," says another ancient physician. Bhang cannot be taken to excess as well as opium. A drunkard's craving increases with each glass. But unless the habit be gradually acquired, he cannot take more bhang or opium than he is accustomed to. The punishment is instant. Moderate use of opium and bhang leads to longevity. This is seen and known throughout the country. The tone of the system remains the same. There is good appetite, good digestion, good sleep, and no after-effect. An opium eater or a ganja smoker is *be-ara* (out of sorts) when the time comes for its use. But after he has it, he becomes fit for business.

43. Oh yes, opium smokers are a timid set of people. Ganja smokers are known to be somewhat irascible. But they are very harmless. Many of our most worthy sayings are attributed to ganja smokers. Their humours and bulls are also well-known. Opium smokers are worthless men,—timid, unwilling to talk, fearful to approach water, inveterate liars, and totally unfit to be entrusted with secrets. They are in mental dread of a drunken man, one of whom can disperse from their perches one hundred gulikhores. But they are not given to violent crimes; are very respectful, although great pilferers.

44. Habitual or not, ganja produces instant intoxication. A habitual feels the effect for at most two hours. One not accustomed remains under its influence from four to six hours. The first use of opium or ganja is productive of nausea. But after some days' use their effect is great. They are certainly refreshing. There is greater intoxication in ganja smoking than in taking raw opium. It does not allay hunger, though a man can hold out more against hunger. Both create appetite. There is no after-effect.

A ganja smoker does feel some inconvenience if the drug be not forthcoming. But an opium eater suffers tremendously if he does not get it at the time he is accustomed to. Many persons die in jail on account of this deprivation. European doctors pooh-pooh it. Yet it is admitted that even when a man survives the deprivation, he suffers for at least thirty days. Christian prisoners get tea because they are accustomed to it. But a man can give it up without inconvenience. It is downright cruelty to deprive a man of opium. Generally it is taken on account of some diseases. The great physician, Rama Nath Kabiraj, died because he was forbidden to take opium. It was the only way to save his life. But the sudden stoppage proved fatal. This is the case in jails, and can be established if proper inquiry be made.

45. (a) and (b) Not at all. Of course opium smoking impairs the constitution or makes a man morally degraded.

(c) Not ganja, bhang or opium (raw) certainly.

(d) No, on the contrary they are preventives.

(e) No, ganja smokers as a body are scrupulously moral, hard working and active.

(f) Ganja produces insanity when taken to excess or by a man of weak constitution. But ganja *pagals* are seldom violent. In many cases stoppage cures insanity. It is curious that ganja smokers are unwilling to confess that they are such.

I have seen insane men discharged as cured become again mad by reverting to its use. Men suffering from anxiety or brain disease often give up ganja under medical advice. Moderate use even in such cases leads to evil. I have seen some instances in which the smoker gave up the habit after some family bereavement, loss in trade, and a criminal prosecution.

46. Excessive use of ganja and bhang is very bad indeed. Ganja makes a man lose fat. Hence you will see every smoker take a little ghee at every meal. There is a saying that the opium and ganja had better be taken by the "amir" (rich man) and the fakir. This means that he that uses opium and ganja must have good food. The "amir" can afford it. The fakir does not mind it. He is always travelling. This is hard labour, and he does not feel the want of good food. Hence it is eminently the stimulant for the poor. The lazy rich man avoids the evil effects, if any, by taking rich food. Labour helps the poor. In this poor country the moderate use of these drugs is highly beneficial. Deprive the poor of these, they will sicken. In the Punjab, North-West, in the Himalaya countries, in marshy and jungly districts, these drugs are extensively used. Every country has its own stimulants as well as food given by nature. Our ancient physicians and kings were no fools to have allowed the cultivation and use of these drugs. Experiments and experiences of ages convinced rulers and people that these drugs were necessary. The great personage Siva, who, and not Bacchus, found out inductive philosophy, made experiments before he would use a drug. Like St. Simon, he experimented on himself. He recommended the moderate use of ganja, bhang and opium. Europeans would do well if, when they sicken, they would use opium instead of drinking wines or spirits.

47. No.

48. Excessive use of ganja destroys both body and mind. Excessive use of opium impairs the digestive organs, and finally the man dies of dysentery. The immoderate use of the best medicine yet discovered by man—quinine—leads to disastrous results. Habitual moderate use is good. As I have said, the tone of the constitution remains always the same. That man is an enemy to the human race who would abolish moderate habitual use of ganja and opium, and drive people to have recourse to that terrible thing, alcohol, or to no less terrible things, dhatura and strychnine, although these in small doses are used as good medicine.

49. Bhang is used as an aphrodisiac, as I have already observed. Opium enables the seed to hold on longer, and licentious men often use it for this effect. Prostitutes dread such people, and charge an opium taker and guli smoker higher. They themselves do not use it to carry on their professions. Ganja and bhang (liquid) are not used as such. As aphrodisiac, bhang is administered by physicians. The use of hemp does not tend to produce impotence, though, like alcohol, it would impair nerve power if taken to excess.

50. Opium smokers gradually lose the virile powers; but, as a rule, it does not produce total impotence. Ganja smoking has seldom this effect, so far my observations go. In this country many young men lose the power on account of drinking alcohol. Indian physicians prescribe a little opium and madak in such cases. A preparation of ganja in the form of sweetmeat (barfi) is also taken as an aphrodisiac. Majum is sometimes used as such, but mostly by up-country men, specially Lucknow Musalmans.

51. Badmashes avoid opium, lest while in jail, they may suffer. But, as a rule, they are ganja smokers. Dacoits and burglars invariably smoke ganja immediately before commencing operations. It has a religious character then. Siya, the husband of Kali, the goddess who protects seondredom, is invoked. There is no connection of these drugs with crime.

Gulikhores are pilferers. They get lazy and unfit for labour. Then they steal. Of course it is the poor gulikhores who are thieves.

53. No. As a criminal lawyer and the public prosecutor for thirteen years, I never came across such an instance. Running amuck can't be attributed to any of these drugs, though the criminal may fortify himself with a cup of bhang. But it is a curious fact that excessive use of opium has a ludicrous effect on some Muhammadans. They are under illusion, and become excessively timid.

54. No; but as I have said, ganja is used to propitiate Siva and his wife, Kali.

55. No. There can't be complete stupefaction unless dhatura seed be mixed. But this is seldom done. All my experience goes to show that powder of dhatura seed is surreptitiously mixed with the food of the victim.

56. Ganja is taken with tobacco leaf, charas with prepared tobacco. Fakirs and sanyasis sometimes put in a seed or two of dhatura to make the ganja stronger. But ordinarily neither they nor the lay consumers use dhatura.

57. Charas is not drunk. I never heard of it. Ganja is sometimes thrown in cups in which the pods of opium are soaked. This is a preparation used by Rajputs. A little ganja is occasionally mixed with bhang, but this is rare. It is done when

the leaves appear to have lost their strength, and not otherwise. The effect is always the same, only the mixture is a little stronger. The opium infusion of the Rajput loses its flavour (as they say) if ganja be used. They do it as a matter of economy when guests are in the house. In districts where opium is grown they keep the pods after the opium has been extracted, put them in water, and drink it.

58. It is working very well. Government have done all that is required.

59. I cannot propose any thing new, although as a newspaper editor of 33 years' standing, I have been compelled to study abkari literature, as well as the numberless trash circulated by the anti-opiumists, who do not know what they are about, but dare teach our Government on a matter when Government do not require any instruction.

60. There is sufficient control. The only proposal I wish to make, and that for the purposes of revenue, is to reduce the duty both on ganja and opium that is consumed in the country. People must use them. If the law puts it beyond the power of the ordinary man to buy it, he must purchase stolen opium, and secretly cultivate the hemp plant. This is done. Only a very small portion of the contraband articles are detected by our preventive officers. The police connive at it; they are the only gainers. But the public treasury suffers.

61. Charas is not cultivated in my province. Here again high duty is doing its work. Almost every man coming from Nepal brings charas, which he clandestinely disposes of. Sentiment in these matters is unadulterated nonsense.

62. I have nothing more to add. Lessen the duty, I repeat.

63. I have no objection. The objections I have seen in parliamentary speeches and tracts are sentimental, and raised by people who do not know anything about these matters and the difficulties of our Government.

64. No.

65. I think I have sufficiently indicated my views about this matter. After giving my close attention to it my deliberate opinion is this: Reduce the duty on country liquor, so that a bottle may not cost more than ten annas. Reduce the duty on ganja, so that one pice worth of it may serve for at least four smokes. Ditto as regards charas. The price of opium varies in different districts: 2½ tolas in Calcutta, 2 tolas at Madhopur, 4½ at Patna. This is courting illicit manufacture and smuggling. Half of the liquors sold in Calcutta shops are contraband.

66. No.

67. I have given my views above. It is bad financing which leads to illicit manufacture and smuggling. One must throw sentiments to the windows; look facts as facts; have regard for our revenue; do nothing by which dealers may be induced to bribe the police and the preventives as is now done. Money is offered. How many men can resist the temptation? Our Government should without ceremony tell the faddists of England to mind their own business and devote their superabundant philanthropy to the myriads of drunkards and wife-beaters at home and not trouble a Government who know their people and whose people know them. Practical statesmanship our Government know, and if any suggestion should be made, it must come from us, the people.

68. Lots. The regulations regarding them are as perfect as human ingenuity and experience can make them.

69. People are seldom consulted, though Government pay every attention to any objection raised by the people. The closing of the katcha distilleries proves how anxious Government are to consult the wishes of their people in this matter. I am strongly for local option. The time has come for it.

70. I have already said much on this head. I do not know if contraband articles come from any

Native State; but this I know, that almost every train that comes from the North-West to Calcutta contains some men who have contraband opium with them. Some years ago, while at Arrah, a servant of the house where I was a guest blandly offered to sell me two seers of raw opium for four rupees only.

These men certainly know how to dispose of these things. Here I again repeat, adjust the duty so as to sell opium at a uniform rate everywhere. Of course, some distinction must be made in places which produce it.

218. *Evidence of BABU NOBO GOPAL BOSE RAI CHOWDHURY, Kayasth, Talukdar and Judge's Court Pleader (late Munsiff of Nator), Memari, Burdwan District.*

1. I was Abkari Sheristadar for four years, and also Collectorate Sheristadar for five years. Besides this, when I was a Munsiff at Nator in the Rajshahi District for two years, I had the opportunity of seeing the cultivation of ganja in the Pargana of Dubalhati, within the jurisdiction of the chowki there, and had the opportunity of having conversation with several jogis, sauyasis, and rich rajas and zamindars. My age is now 60. On receipt of these questions, I had to consult with kabirajes, hakims and doctors, i.e., professors of medical science in different countries. At the age of 19, I entered into the Excise service.

2. Yes, these definitions may be accepted in our province with some additions. According to Sanskritists, the following names are known:—

(1) Bhang, (2) Ganja, (3) Matulani, (4) Mohini, (5) Bijaya, (6) Jaya, (7) Mongola Bich, (8) Gánja, (9) Sakrasan.

Some people call ganja "turitananda." Some say that ganja is the king of all intoxicating drugs.

3. In Nepal and Gwalior districts hemp plants are grown spontaneously in jungles. This I have learned from several Khettri gentlemen of this place who had gone to Nepal.

4. This question is answered in question 2.

5. I don't know anything about wild hemp. It seems to me that in moist and damp climates (such as in Pargana Dubalhati in the Rajshahi district) and where the productive power of the soil is very great, ganja is produced. For example, I have seen in the Rajshahi district mustard plants grow to the height of about two or three cubits.

6. The growth of the wild hemp is dense and also scattered. This I have heard from sanyasis or up-country mendicants.

7. Hemp is cultivated in the Nepal district, and in Pargana Dubalhati, in the Rajshahi district, for ganja. Hemp is cultivated for siddhi, bhang, in Patna. I know nothing about charas. The production of Rajshahi makes supply to whole Bengal.

8. I don't know.

9. If ganja be cultivated one year, for next three years the lands wherein it was cultivated would remain uncultivated.

Manure and mustard cakes are to be poured upon the lands in large quantities, in order to increase the productive power of the land. The female plants are to be uprooted, otherwise the

other male plants would be full of seeds and useless.

10. I don't see that the cultivators of ganja form any special class.

11. As far as I know, ganja is now cultivated from seeds of the cultivated ganja.

12. Nowhere in Bengal is wild hemp produced. If ganja be grown in anybody's lands, it is destroyed for fear of police. In Dubalhati, the female plants are extirpated, which are injurious to the male plants. In Raniganj sub-division a Mahant was fined Rs. 10, as there was a wild hemp plant in his garden about three years ago.

13. In Bengal, in Pargana Dubalhati, in the Rajshahi district, is ganja produced. I have already said about climate. I don't know why the district was selected. I think very good fertile lands are necessary for such cultivation.

14. Yes, ganja is produced and prepared in Dubalhati, in the district of Rajshahi. Siddhi is grown and prepared in Patna. The former in Dubalhati, and the latter in Patna, is found in abundance. As regards charas, I know nothing.

15. I have already said about the method of cultivating cultivated hemp. Ganja and charas are used for smoking, and siddhi is used for three purposes. The ganja-smokers smoke siddhi for want of ganja. The method of preparing cultivated ganja is this. The cultivators of ganja cut the ganja at about 5 P. M. and bring it home to their yard, and they there sun it. Then from 12 o'clock in the morning they thrash it and sun it again one or two days, and then make bundles of flat ganja.

16. Bhang is prepared in the Patna district. I did not ever hear that any people prepare bhang in their houses. I am not prepared to say anything on the subject.

17. The agriculturists cultivate these plants. No particular class of people is meant for their cultivation, as Sunri caste was formerly intended to make country wine.

18. Ganja more than four years. Bhang more than three years. Charas never deteriorates.

19. Yes, ganja and charas are used for smoking. Sometimes the ganja is used otherwise, which has been described elsewhere.

20. At present among the educated people ganja and charas are rarely used. In my own experience, and on consultation with medical men, I come to know that moderate use of ganja makes a man hale and hearty and cheerful. That the abuse of ganja produces insanity in special cases

is a fact. Constant use of ganja without good food leads to fatal consequences. It has been seen with men who indulge in ganja to render themselves subject to the fatal diseases of consumption, dysentery and insanity as an essential consequence. Rogi, jogi, bhogi and dagi use ganja. The rogi use ganja to get rid of certain diseases, the jogi for devotion purposes, the bhogi for digesting purposes, and the dagi for encouragement in desperate acts. Those persons who are in the habit of visiting prostitutes use charas. Those who act as actors in opera, etc., use charas. Those, that intend to prevent malarious fever, and try to keep health in bad climates and who are diseased, use ganja. The former is 10 per cent., and latter 50 per cent. Educated bhadralok hardly use it.

A song is often spoken of by the smokers of ganja. It is translated thus :—Ganja is the king of all intoxicating drugs, it maketh a man easily merry, and it produceth pleasure in the mind. It removes all sorrows and pains of deaths of relatives, and makes an old man young, and it weakens the pain of whipping.

On account of malaria many people use ganja excepting the respectable classes of people.

There is a proverb current among the lower class of people, which means that by the use of ganja one becomes talkative like a parrot, while another becomes solemn like an owl, and a third sleepy like the notorious Kombhakarna, a character of Ramayan, who was fond of sleeping for entire year except two days.

21. The flat ganja is extensively used in this district; while round ganja is used by the people of Manbhum.

22. I am not prepared to say anything.

23. When smokers of ganja do not get ganja, they use bhang.

24. The up-country men, the intermediate class of people who come to this country, and the jogis and sanyasis, and those who suffer from diarrhoea, eat and drink bhang.

25. The use of ganja is on the increase, as the system of outstilling liquor is discontinued.

26. The sanyasis and jogis are habitual excessive consumers. The grihastas are habitual moderate consumers.

It is very difficult to estimate the proportion.

(a) 80 per cent., householders.

(b) 20 per cent., but jogis and sanyasis quite opposite.

(c) 20 per cent., but jogis and sanyasis quite opposite.

(d) 20 per cent., but jogis and sanyasis quite opposite as before.

27. These classes of people are taken from the up-country, low and intermediate classes of people, i.e., from those who come from Behar and the North-West for menial service here, such as, door-keeper, pankha-puller, water-bearer, etc. The notion of these men is that they cannot live here unless they use ganja to prevent malarious fever.

28. The proportionately rich people use milk and ghi as stimulant for ganja, while the poor can't afford to use milk and ghi. The cost is proportionate to the means of ganja-smokers. It is difficult to ascertain the allowance; that of poor class moderate consumers is two pice daily; that of excessive consumers is daily two annas; that of rich class moderate consumers is eight annas

daily; and that of excessive consumers is daily two rupees, because they use in company and merge the ganja in rose-water and they bring many kinds of eatables along with ganja.

29. Some jogis use serpent's kholos along with ganja, and some ganja-smokers use dhatura along with it. The ingredients for the preparation of bhang are—dhatura seed, ghargara, atap rice, roots of lau plant, cucumber seeds, milk, sweet-meats, cinnamon.

30. These drugs are practised in solitude as well as in company. As wine is taken in company, this is not the case with these drugs. The male sex generally use them, but some prostitutes and Bhairabis are seen to smoke ganja. This vice begins with a man in his youth. But once commenced, it continues up to the old age. Those who use ganja, and know its use to be beneficial, try to have their children accustomed in ganja-smoking. The adult members in a family using ganja, the children thereof acquire and learn and inherit the habit.

31. This habit is easily formed. To break it off is difficult. Yes, there is a tendency for the moderate habit to develop into the excessive.

32. As regards siddhi, there is a religious custom. The Hindus dedicate siddhi (simple siddhi) to the use of Bhagabati (Durga), goddess worshipped in September, on the Bijaya Dashami day (last day of Puja). That day, siddhi is generally used by all members of a Hindu family, as a matter of religious necessity. This is done according to the ordained rules of the Hindu shastras. To break this custom is to violate the rules of shastra. The educated Bengalis and the freethinkers disregard this custom. This custom does not allow an excessive use. The followers of Siva offer ganja to Siva, and Muhammadan fakirs offer it to Pir. The use of Bijaya siddhi is only for one day in a year. It is not likely to lead to habit.

33. Siddhis are used mostly by up-country men of middle and higher classes. The most of them use it; they do not indulge in any other intoxicating drugs. For this there is no social disrepute. The natives use siddhi for medicinal purposes. Charas was used formerly by men in their young age, but now educated Bengalis hate it, and they are used by up-country men. Ganja, if used by any rich native, is used after being merged in rose-water for a whole day. The bhadralok use ganja privately. The up-country men and the low class Hindus and jogis use publicly and openly. Men say that lakhichharas (penniless persons use ganja). I have never heard of a ganja plant being ever worshipped by any Hindu.

34. Yes, it would be a serious privation to any class of consumers to forego the consumption of the drug. My idea is that if the habit of using siddhi and charas be discontinued, that would affect the consumers most; but in ganja cases, 50 per cent. would die of diarrhoea and rheumatism, if this habit be suddenly discontinued. This is my conjectural opinion.

35. According to my opinion, it is not desirable to prohibit the use of these drugs. If prohibited, it would be consumed illicitly. Yes, this prohibition would occasion serious discontent. But there is no chance of any political danger. Yes, it is probable that this prohibition would be followed by recourse to other stimulants. This prohibition can be enforced by legislative enactment and judicial sentence, by enforcing penalty upon the consumers of ganja.

36. Any of these drugs is not substituted for alcohol. I don't think there has been any change. I think the latter dearer than former.

37. The effects are different; and effects of charas-smoking only give pleasure in the mind, but serve no medicinal purposes. But ganja cures many diseases, such as, rheumatic pain, leprosy; it increases male strength. According to native kabirajes, hakims and doctors, medicines can be prepared from ganja.

38. The people here use round ganja. The round ganja is superior in class, the next in kind is flat ganja, and chur is the worst of the kind.

39. Majority of people prefer smoking. Very few occasionally drink and eat. The former system is less injurious.

40. These drugs are used by native doctors for medicinal purposes. I have never heard of its ever being beneficial to cattle disease.

41. (a) Yes, I have already stated before.

(b) Yes.

(c) Yes.

I know nothing about ganja.

The coolies come from Hazaribag, Purulia, Bankura, Birbhum, to Burdwan and Hughli, for menial service or cultivation purposes. Up-country men such as pank-puller, palki-bearer, water-carrier, darwan, constable come to Burdwan, Hughli, after those districts turned to be malarious; also low classes, Bagdi, Hari, and Chandals, use ganja as preventive of fever. The number of up-country men, who consume ganja is greater than that of the natives.

42. Yes, if not beneficial, moderate use of this drug is harmless. Moderate use is refreshing, and does create appetite, and bad climate can't injure health; the exposure would not make ill such, as constables in winter season are required to patrol in the night. They, I hear from several persons, keep health for the moderate use of ganja. They don't use excessively for the fear of being detected; so it is harmless.

43. Yes, inoffensive.

44. They would get ill and lose digestive power. Yes, refreshing. Yes, it creates appetite. According to some, its effects last for twenty-four hours, and others for more than that. The after-effects are desire for smoking ganja again. The want of subsequent gratification produces longing and uneasiness.

45. The habitual moderate use of any of these drugs does not produce any noxious effects, physical, mental or moral. It does not impair the constitution, nor does it injure the digestion, or cause loss of appetite; nor does it cause dysentery, bronchitis or asthma. Moderate use of ganja with good food does not produce any bad effects above mentioned. In my entire experience I have seen many rich men live a long life and die a good death after a habitual moderate use of ganja.

46. Excessive use of any of these drugs, and not accompanied with good food, leads to fatal consequences.

That the abuse of ganja produces insanity in special cases is a fact; constant use of ganja without good food leads to fatal consequences. It has been seen with men who indulge in ganja to render themselves subject to the fatal diseases of consumption, dysentery and insanity, etc., as an eventual consequence.

As to charas, I have no experience. As to ganja, I have learned by enquiry, and once I

heard that the consumers have the ganja mixed in water, and drink the same; and when consumers of ganja don't get ganja, they smoke subji. The people who are consumers, use and drink ganja as above for medicinal purposes. I quote Sanskrit Madanpur. A sanyasi told me that if some of other drugs be powdered with ganja and used with water, leprosy may be cured.

47 and 48. No.

49 and 50. I can't answer this question.

51. I have never heard of any such ganja-smokers ever committing any crime being intoxicated.

52. The same answer as the preceding one.

53. A criminal case was committed to the Sessions Court of Burdwan in which a Brahmachari sacrificed a human being. The Brahmachari confessed having sacrificed a human body; he said to me that when he killed the body, he was not in his proper senses, on account of intoxication of ganja; he used to smoke ganja excessively.

54. The criminals of this country addict to the vice of taking liquor, but whether the criminals of the North-West use ganja or not, I can't say.

55. I have never come across such an accident.

56. Moderate use of ganja with good food improves health. The moderate habitual consumers never mix any other ingredients with ganja. Excessive smokers use dhatura seed and snake-kholes along with ganja to make it more powerful and strong.

57. It is already answered.

58 and 59. This system is good. I have nothing to say and suggest about its improvements.

60. In this District of Burdwan, cultivation of ganja can be made. This I say from experience. I don't find any reason of modifying the system. The ganja is produced in force for controlling the process of its preparation.

61. I don't know anything of it. I have ascertained from many consumers that charas cannot be prepared here.

62. I can't say anything. I have no experience. Having consulted many a person on the subject, I come to the opinion that use of bhang is altogether harmless and beneficial to the health of the consumers; so I suggest that cultivation of bhang by the public may be permitted, and bhang should be exempted from the operation of excise law, and at the same time a heavy punishment should be prescribed for making ganja clandestinely on pretence of making bhang.

63. I have no objections.

64. I have no objections. The existing regulations are good. In my opinion there is nothing to suggest any alteration.

65. In my opinion the taxation is not unreasonable.

66. When there are different qualities of different kinds of ganjas, in my opinion, different rates of taxation ought to be introduced according to the quality of each kind, on this principle that taxation would naturally make the price of this kind of ganja high; that would deter the consumers to use excessively, but moderately.

67. I have no objections.

68. I don't know.

69. No. The public ought to be consulted in my opinion. At present only neighbouring licensed vendor is consulted; if he would say that there is no objection, the new license may be granted.

70. I don't know.

219. *Evidence of* BABU ABINAS CHANDRA DASS, M. A., B. L., *Pleader, Judge's Court, Bankura.*

1. Personal observation and enquiry.

2. The hemp plant is not cultivated in our district; neither are ganja, siddhi and charas manufactured here. Dr. Prain's definitions may be accepted for our province, though there is a popular belief in our district that siddhi is not manufactured from the leaves of the hemp plant, *i.e.*, the plant from the flowers of which ganja is prepared. Siddhi, they say, is manufactured from the leaves of a distinct species of plant. The three narcotic articles are known in our district by the names of siddhi, ganja and charas. Ganja has three names according to its variety, *viz.*, gol (round ganja), chipta (flat ganja), and chur (or broken ganja). Siddhi is also known by the name of bhang.

3. I have no knowledge of any district in which the hemp plant grows spontaneously; but I am told that it is both spontaneous and abundant in the districts of Jessore and Rajshahi. I am also told that hemp grows wild in parts of the district of Singhbhum.

4. The wild hemp of the district of Singhbhum is said to be a distinct plant. The ganja, that is manufactured from it, is stronger and more narcotic in its effect.

5 and 6. Do not know.

7. Yes. There is cultivation of the hemp plant in Jessore and Rajshahi.

13. The cultivation of the hemp plant is not common to all districts. It is not cultivated in ours; and if people addicted to hemp secretly cultivate this plant, it does not flower at all, so ganja cannot be manufactured in our district. I am told that the leaves only are used as siddhi. I think there are special conditions of climate, soil, rainfall, etc., which are necessary for the cultivation of hemp for producing ganja.

16. In our district bhang used to be prepared by the people addicted to it in their houses. But this practice has been put down by the local authorities. I think bhang can be prepared from the hemp plant wherever grown. The hemp plant does not flower in our district; hence I think is the popular belief that the plant from the leaves of which siddhi is prepared is quite distinct from the plant from which ganja is produced.

18. All the three drugs deteriorate by keeping; and I am told they quite lose their effects in time. They keep good with ordinary care for two years at most.

19. Charas is used for smoking only. Ganja is generally used for smoking, but sometimes for medicinal purposes also. People prepare an oil with ganja and other things for the cure of itches. I have found this ointment to be very effective. Lepers use ganja under the notion that it helps the cure of their disease. People suffering from chronic diarrhoea sometimes use ganja.

20. There are no distinct classes of the people who smoke ganja and charas. Ganja and charas smokers are found in all classes of the people. Among householders and family men, it is only the debased that are addicted to these drugs. The sanyasis as a class smoke ganja. I think they do not smoke charas. If one per cent. of the people smoke ganja, 5 per cent. smoke charas.

21. Round ganja is preferred for smoking in our

district. The effect of its smoking is said to be moderate and soothing (of course to the smokers). Flat ganja is said to be very strong and exciting. While chur ganja is said to be very mild in its effect.

23. Bhang is sometimes used for smoking. But this is resorted to only in extreme cases, that is to say, when ganja is not available to smokers.

24. Bhang is sometimes eaten with pān. All class of the people eat or drink bhang. The proportion of bhang eaters or drinkers is greater than that of ganja smokers.

25. The use of ganja, charas and bhang is now on the decrease. I think wine has partially taken its place. With the decrease of faith in Hindu religion, with certain people wine has been on the increase, and consequently ganja, etc., have been on the decrease.

27. Sanyasis are habitual moderate and excessive consumers of ganja and bhang. The lower classes of the people do not always smoke ganja or charas or drink bhang. It is only the respectable-looking classes that are largely addicted to these drugs, specially those who from their religious prejudices or social restrictions cannot drink wine. The ganja and charas smokers are always a degenerate and disrespectable lot.

28. The average allowance and cost of ganja to habitual moderate consumers is two pice per diem, and to habitual excessive consumers about six pice per diem. That of siddhi to habitual moderate consumers is one pice per diem, and to habitual excessive consumers about two pice per diem.

29. The ingredients which are *ordinarily* mixed with bhang are—seed of the cucumber, kernel of almond, poppy seed, round pepper and mouri. These are crushed along with siddhi, and made into a drink with the mixture of water. Bhang-drinkers say that this mixture has a soothing effect.

The ingredients which are *exceptionally* mixed with bhang are—sugar, milk, and seed of dhatura. This mixture makes the drink highly intoxicating.

30. Siddhi is generally drunk in company, but ganja and charas are not often smoked in this way. Sanyasis are in the habit of smoking ganja in company. The consumption of each of these three drugs is mainly confined to the male sex, but not to any time of life. Children of the lower classes have been known to drink siddhi and smoke ganja; but it is not usual with them.

31. The habit of consuming ganja and charas is easily formed. It is very difficult to break off. There is a tendency in the case of ganja and charas for the moderate habit to develop into the excessive.

32. Ganja and siddhi are used on two occasions of religious festivity—once on the night of Bijaya Dashami, and once on the occasion of Sivarati. The use of these drugs in connection with these festivities is not regarded as essential. Young men want a little hilarity, and as wine is forbidden to them, they resort to these drugs for excitement. It is a custom with sanyasis to smoke ganja, because they think it essential for their religious practices. Ganja, they say, helps them to

restrain their passions and commune with God. But this is injurious to their system and often turns them into inveterate smokers. The use of ganja by young men on religious festivities often leads them to the formation of a habit.

33. The consumption of ganja, charas and siddhi is always looked with disfavour by the people. Excepting the sanyasis, nobody ever supports the custom of using these drugs. These narcotics are ever in disrepute. Ganja and charas undermine the intellect and make a man devoid of common sense and totally unfit for the world. People never trust a ganja or charas smoker. As soon as a man is known to have contracted a habit of smoking, he is put down for lost. His Lakshmi (or goddess of Fortune) is said to desert him, and people believe that he will be a ruined man before long. In a word, the consumption of these drugs by a man is always looked with horror.

I know of no custom of worshipping the hemp plant.

34. If sanyasis have to forego the consumption of ganja, they would regard it as a serious privation; and so would inveterate smokers among householders. To others, it won't be any privation at all. These remarks hold good in the cases of siddhi and charas also. Barring the sanyasis, the number of those who would suffer any serious privation to forego the consumption of these drugs is, I think, only 5 per cent. of the consumers.

35. It would be feasible to prohibit the use of ganja and charas. Siddhi may be allowed to be used. In that case, ganja and charas won't be illicitly consumed. The prohibition of ganja and charas may be enforced by levying a heavy tax upon them. The prohibition won't occasion any serious discontent among the consumers; and the discontent would never amount to a political danger. Ganja and charas should not be prohibited altogether by legislation. They should be heavily taxed; so that consumers would get only a very small quantity for what they can afford to expend on them. Necessity would compel them to use small quantities; and from small quantities, they may give up the habit altogether. The prohibition in certain cases may be followed by recourse to alcoholic stimulants.

36. I am of opinion that certain people are born with a propensity for stimulants. Bad company only serves to give it an impetus. Those who would drink wine would not care for ganja, charas or siddhi. But those who have religious prejudices or fear the social ban, take to ganja, etc. These people would never drink wine, even though ganja be prohibited. Religious scepticism or unbelief has caused to a certain extent the substitution of alcohol for these drugs. The lower classes of the people who are not Hindus take to wine, because a few pice spent on wine would cause them more intoxication and hilarity than ganja, charas, etc., and wine is not prohibited to them. These lower people are neither Hindus, Muhammadans nor Christians. They are the aborigines and often nondescripts.

37. The effects of charas-smoking are not different in any particular from those resulting from ganja-smoking.

38. Flat ganja is very strong and exciting. It makes its consumer very irascible and sometimes violent. Round ganja is milder in its effects and soothing to smokers. This is generally preferred. Chur ganja is mild, dull and vapid, and does not command many votaries.

40. Ganja is used in a preparation of oil for the cure of itches. No school of native doctors prescribe its use to lepers; it is only the quacks who advise its use to them. Siddhi is used by kabirajes in a preparation of medicine for the cure of "ambalshul". Charas is never prescribed by anybody for any disease.

41. The moderate use of ganja is sometimes thought to be beneficial in its effects, (a) as a food digestive, (b) to give staying power under severe exposure, and (c) as a preventive of disease in malarious and unhealthy tracts. But whether this is actually beneficial in its effects or not, I cannot say.

42. If the moderate use of ganja is not beneficial in its effects, I cannot say that it is harmless. A moderate use will lead to immoderate use; and it will serve to gradually sap the intellect of the consumers and make a wreck of it. Besides, it is not economical. Ganja-smokers want a little milk and ghi which entail on them an additional expense, which is often too much for poor people.

43. Moderate consumers of ganja, siddhi and charas are generally inoffensive to their neighbours. But as long as the effect lasts, they are very excitable. Hot words, incoherent talk, and abuse would often result where one would think there was no sufficient provocation for them. Red rolling eyes would often show that the owner of them is under the influence of any of these drugs; and so people would take care how to talk with him.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumer is stimulating. I can't say whether it is refreshing. Perhaps it is so. It does not produce intoxication, but a little excitement. As long as the effect lasts, the man does not feel hungry; but after that, he does. One of its after-effects is a little prostration. Want of subsequent gratification does produce a longing and uneasiness. The effect lasts for nearly an hour.

45. The habitual moderate use of all these drugs produces noxious effects, physical, mental and moral. It impairs the constitution of the consumer and makes him look haggard and lank. It injures the digestion and causes dysentery, bronchitis and asthma. It impairs the moral sense and induces habits of immorality and debauchery. It also deadens the intellect and makes the man devoid of common sense and reason, if not insane. I am not aware of any instance in which the habitual moderate use of ganja, charas or siddhi has made the man insane. If want of common sense and sometimes of reason is insanity, then certainly does the habitual moderate use of ganja produce insanity. But this is an insanity of a very mild type which can be cured by giving up the habit and again induced by taking to it. Habitual moderate consumers have lucid intervals, that is to say, when they are not under the influence of ganja, then they behave like ordinary men.

46. The habitual excessive use of all of these drugs ruins the man for ever. Physically, mentally and morally, he is lost for good. I have seen insane persons who are habitual excessive smokers of ganja, but had no means to judge whether keen mental anxiety or brain disease had anything to do with it. These men are always violent and do not know or cannot comprehend what they do. Hence, they behave like mad men. I should like to do away with both habitual moderate and habi-

tual excessive use of these drugs. I have no objection to people's *occasional moderate use* of them.

47. I cannot say whether the habitual moderate use of any of these drugs is a hereditary habit or not. But this I can say for certain that it affects the children of the moderate consumer used in this way. It sets a bad example to children who gradually learn to think that even a moderate use of these drugs is not so bad a thing after all. They are thus in danger of contracting a habit which may either be moderate or excessive. In this sense the habit may be called hereditary.

48. After what I have said about the habitual moderate use of these drugs, I think I need not discuss the question in regard to their habitual excessive use.

49. The moderate use of ganja is practised as an aphrodisiac. I am not aware of any instance in which the moderate use of hemp has produced impotency.

50. Excessive use of hemp produces impotency.

53. The excessive indulgence in ganja and siddhi incites to unpremeditated crime, violent or otherwise. On the slightest provocation, an excessive ganja-smoker becomes infuriated and does all sorts of mischief. Violence is used to members of the family for little or no fault. I know of no case in which excessive indulgence has led to temporary homicidal frenzy.

54. When wine is not available, these drugs are resorted to by criminals to fortify themselves to commit a premeditated act of violence or other crime.

55. Yes. Complete stupefaction can be induced by ganja and siddhi without admixture, when the victim is not in the habit of using them.

56. When people want to be well intoxicated, they mix dhatura with siddhi.

Oral evidence.

I have been pleader for two years. I am 27 years of age. My experience is confined to the district of Bankura, and indeed really to the town of Bankura. The Indian Association sent me the questions to answer. The Indian Association is a political association in Bow Bazar, of which Babu Surendranath Banerji is Secretary. Several other pleaders in Bankura and I were selected, and the questions sent to us individually "with the compliments of the Indian Association."

Question 20.—It is only among the higher classes that it is the debased only who use the drug. I know of the use by the lower classes. In our district, however (*vide* answer 27), the lower classes usually take liquor: it is the higher classes, whose caste prevents their using liquor, who use the drugs chiefly. The sanyasis are a class by themselves. They are respected, but not householders. In answer 27 I am speaking of the general population.

Question 27.—In my last sentence here I had in mind the higher classes only. Among them, however, the occasional or moderate use does not make a man degenerate or disreputable. It is the excessive habitual use. There are some among these classes who smoke ganja moderately. These are not disreputable. The moderate consumers are more common than the excessive. The excessive use is exceptional even among the respectable classes. My sentence is quite wrongly expressed. I should have had the word excessive inserted. That was my meaning. The same remarks apply exactly to the third sentence of my answer 20.

This was what I meant at the time I wrote. My mistake is due to the loose employment of language in employing the words "ganja or charas-smoker" for the excessive consumer of these drugs.

Question 33.—These remarks entirely refer to the excessive consumption of ganja. But sometimes the moderate use develops into the excessive. Therefore people are generally afraid of their friends and relatives contracting the habit. The remarks regarding effects, however, I desire distinctly to confine to the excessive use.

Question 44.—The Bengali word for "intoxication" is "unmattata." The Bengali word for "excitement" is "samanya nisha." "Samanya" means a little. Another single word would be "uttejana", which means stimulating effect. I know only a little Hindustani. I understand "unmattata" to be a stronger word than the word "nasha." The word "nisha" is a common Bengali word. This is a wide word which goes from the smallest stage of excitement to the worst stage of intoxication according to the word you compound with it. Thus "samanya nisha" means excitement merely, and "ghor nisha" is intoxication. "Ghor" means much.

Question 45.—It is not the habitual moderate, but the habitual immoderate use that produces the effects mentioned in the first five sentences of this answer. The next sentence is right. The seventh and two following sentences refer to the excessive or immoderate use. The kind of excessive use to which I refer in answer 46 is the same as the excessive use I now speak of.

There is great difficulty in distinguishing between moderate and excessive use. What is moderate to one person is excessive to another. I have seen a man to whom a very small dose, which would have been very moderate to another, was very excessive. This was the origin of this confusion. In other words, I was thinking of a certain amount, and I remembered that that might be excessive to some people, though moderate to others. It was not that the only effects I had seen were cases of excess; and that it was these cases I had in my mind. Neither was it that I was only thinking of ganja generally and merely copied in the words "habitual moderate use" from the question. I was thinking of a special amount, *viz.*, four chillums every day; and I gave it this name "habitual moderate use." But I now mean to say that, though that might be "habitual moderate use" to some, it would be too much for others; and it is only these others, to whom it would thus be too much, who would suffer the ill effects described in this answer. I was thinking of ganja-smoking as meaning four chillums a day.

Question 46.—When I said I should like to do away with both habitual moderate and habitual excessive use, I was animated by the impossibility of distinguishing definitely what is excessive from what is moderate. And I was not thinking of the habitual moderate use of the drug by agriculturists and other labouring classes outside the town of Bankura. It is not my opinion that ganja should be prohibited.

Question 53.—I have seen actual cases of irritability on the part of ganja-smokers and violence by them to members of their family. I know of no such case as having come into court. I have known cases among respectable people of beating wife and children and using abusive language to neighbours. I have seen such cases. The man was under the influence of ganja, and was known to be an excessive consumer. I have seen two such cases, and heard of others. The rest of my answer is impression based on hearsay.

220. *Evidence of* BABU ANANGO MOHAN NAHA, *Kayasth, Judge's Court Pleader, Comilla, Tippera District.*

19. I have known ganja only used for smoking.
20. In my district ganja is generally used by the lower classes of people, and that in places where there are bazars with a neighbourhood of low class men. Occasionally I have seen big zamindars addicted to ganja-smoking, but the middle class people are free from this habit.
24. In Comilla the up-country Deswallis eat a small quantity of bhang.
25. The use of ganja is on the increase. Formerly in any place where there was no ganja-smoker we have now more than twenty or many more.
27. Not the cultivators, but the low labouring classes of the people.
30. Ganja is used or smoked in company and not in solitude. Ganja is used by male persons after they become majors.
31. The habit of ganja-smoking is easily formed. It is difficult to break off the habit when once formed. The ganja-smokers generally get into excessive habit of ganja-smoking.
32. In our district there is a quasi-social or religious ceremony called Trinath mela held by low class people, who smoke ganja very much on the occasion and sing all sorts of songs. The use of ganja is essential on this occasion, and this has led to the spread of the bad habit of ganja-smoking in this district.
33. Ganja or bhang consumers are generally hated by the respectable people, because their use is connected with something low or detestable.
34. It would be serious privation, no doubt, to many smokers.
35. It would not be feasible to prohibit the use of any of these drugs. The prohibition may lead to the habit of drinking alcoholic stimulants.
40. Native physicians prescribe bhang or some preparation of it in acute disorders of the stomach of men. I have known of cases of this nature where bhang did excellent work in curing looseness of stomach.
41. Yes, the moderate use of these two drugs gives staying-power under severe exertion or exposure and also alleviates fatigue. In cholera epidemics I have seen lower classes of people use bhang as a preventive and also as medicine with success. Small number of low class people use bhang in epidemic cholera. I mean the occasional use of the bhang drug.
42. The moderate use of these drugs is harmless. I have given my reasons in answer 41.
43. Yes, they are inoffensive.
44. Keeps him in the normal state of body and mind. The use is refreshing to the habitual consumers. It creates appetite. Its effects last nearly 2½ hours. The want of the use of these drugs by the habitual consumers puts them to great uneasiness.
45. I have known of very strong men as well as men of weak intellect getting insane on account of the excessive use of ganja. Sometimes temporary insanity is produced. In East Bengal many of the insane persons become so on account of the use of too much ganja, which affects the brain injuriously.
47. In most cases I have seen the sons of the fathers addicted to ganja-smoking also smoke ganja.
51. Yes; almost all the bad characters in any locality are habitual consumers of these drugs. Ganja-smokers are generally thieves.
62. The cultivation of the hemp plant for the production of bhang should be, in no way, controlled.
68. There are shops or houses in the district where these drugs or their preparations may be consumed on the premises. This is objectionable for this reason that it tends to make the consumers more depraved than ever and that the shopkeepers make best of their position at the expense of these consumers.
69. No, never. Only the report of an excise officer is required to put up a shop in any new place. Sometimes these shops are very objectionable in some places. Public opinion or gentlemen of position and respectability should be asked before opening a new shop.

221. *Evidence of* BABU KAILAS CHANDRA DUTTA, *Baidya, Vakil, Judge's Court, Comilla, Tippera District.*

1. As a resident of Tippera District, I had occasion to see people smoke ganja, and hear from others. My knowledge of this subject is very limited.
2. In Tippera it is ordinarily known as ganja. To my knowledge, charas is not used here.
3. Rajshahi.
4. Here it is known only as ganja.
5. Don't know.
6. Don't know.
7. To my knowledge, there is no cultivation of ganja in this district. Bhang plants are here and there to be found. But as a rule they are not cultivated here.
14. No,—not to my knowledge. Bhang leaves are pounded and occasionally taken as a draught mixed with water. Some people habitually use bhang preparation, but others use it as medicine in diarrhoea and bowel complaints.
16. Yes, bhang is prepared by the people in their houses, but not generally.
17. Up-country people here make bhang preparations, as well as some people of the lower and middle classes.
19. Ganja is used here for smoking and occasionally for medicinal purposes.
20. A very small proportion of the people smoke ganja in this district. It is generally confined to the lower orders of the labouring class and sanyasis. Boatmen, fishermen, singers, namasudras, gipsies, and others use it. It is not specially confined to any particular locality.

21. Flat and round ganja is ordinarily used.
23. To my knowledge, bhang is not used for smoking.
24. A very small proportion use bhang; may be one in a thousand.
25. Yes, the use of ganja is on the increase. There is a greater quantity consumed every year now than it was five or ten years back.
26. About—
- 3 per cent.
 - 2 per cent.
 - 1 per cent.
 - 1 per cent.
27. Boatmen, fishermen, men of the bearer class and hewers of wood use ganja as a stimulant for doing work. Sanyasis take for religious purposes. People frequenting a religious gathering called Trinath mela smoke ganja as a sort of pleasure under sanction of religion. Songsters use ganja to keep their voice clear and to prevent its being hoarse.
28. (a) Varies from two pice to four pice.
(b) Four pice to four annas.
30. Generally ganja is smoked in solitude, except in Trinath mela, where the smokers assemble at a place at night. It is generally confined to the male sex, but females and children occasionally smoke ganja. Females of the singing class generally use it.
31. Yes, the habit is easily formed. It is very difficult to break it off. Yes, there is a tendency to excessive habit.
32. Trinath mela is a sort of religious gathering, where people meet and smoke ganja. They meet at a place at night and smoke away ganja and sing till late at night. It is indulged in excessively. Yes, it is likely to lead to the formation of the habit of smoking ganja and proves injurious to health.
33. Yes, a ganja-smoker is held in disrepute here. A ganja-smoker is not generally believed. It is the general belief that if you give a chillum of ganja to a man you can make him do anything. A ganja-smoker cannot do without it. In courts of justice we find sometimes witnesses being cross-examined as to whether they smoke ganja; if the answer be in the affirmative, it is sought to be inferred that the witness is of disreputable character and that he has been gained over by the party producing him to depose in his favour.
34. It would be a serious privation to the working class, who use it as a stimulant. But their number is small, say one in a thousand.
35. It is not feasible to prohibit it altogether, though it may be restricted. In districts where the drugs are not grown, prohibition would lead to illicit importation from districts where they are grown. Prohibition would, of course, occasion discontent among the consumers, but it would not certainly amount to a political danger, as the general public would not sympathise with them. Prohibition is not likely to be followed by recourse to alcoholic stimulants or other drugs, such as opium, as they are more costly and as these stimulants are of a different character.
36. I do not know of any such instances, nor have I reason to think so.
40. Yes. I am not aware whether they are used in cattle disease.
41. (a) Cannot say.
(b) Yes.
(c) Cannot say.
- I refer to moderate occasional use.
42. Generally ganja-smoking produces injurious effects on the constitution of the person smoking. A ganja-smoker (even a moderate smoker) may be at once detected by his blood-shot and red eyes and the peculiar expression of his face.
43. A ganja-smoker is not generally riotous in his conduct nor a breaker of the peace. He smokes quietly and does not talk much. But a habitual smoker becomes a bad character and is given to stealing. A ganja-smoker is generally seen to be of irritable temper and is liable to fits of anger.
44. Yes, it produces longing and uneasiness.
- 45 and 46. I am inclined to think that it impairs the constitution. It produces congestion of the brain and redness in the eyes. It interferes with sound sleep. A ganja-smoker may sit up the whole night without going to bed. It keeps the system abnormally hot. Yes, it occasionally produces insanity, both temporary and permanent. Excessive indulgence only produces insanity.
- 47 and 48. No, it is not a hereditary habit, though the example of the father may now and then be followed by the son.
49. Yes, it is also used by prostitutes now and then.
52. Yes, a large proportion of bad characters in the village are addicted to ganja-smoking.
53. Yes, excessive indulgence leads to outburst of temper, which cannot be controlled, and which may lead to perpetration of violent crimes.
54. I am not aware of.
- 63 and 64. Yes, I have. At present too much facility is given to the people for free purchase and use of ganja. Ganja should be more highly taxed and should be sold in head-quarters only. Now they are placed at the door of the people.
65. Ganja and charas should be more highly taxed, at least double the present rate.
67. Yes, I have.
68. I am not aware of.
69. Local public opinion ought to be considered.
70. I am not aware of.

222. *Evidence of BABU MOHINI MOHAN BURDHAN, Kayasth, District Government Pleader of Tippera.*

1. As a pleader enjoying an extensive practice, I have had ample opportunities of coming in contact with all classes of people in the District, and studying their characters, habits, and modes of life as they presented themselves to me. Hence the knowledge that I have acquired as to the habits of the various sections of the people, so far as relates to the matter under enquiry, is partly the result of observation extending over a period of twenty years and partly of informations received second-hand.
2. Yes. Dr. Prain's definition may be accepted. But of the three varieties of ganja mentioned by him only one species, viz., flat ganja,

is known in this part of the province, and is generally used.

19. These are used only for smoking at least. I do not know of any other use.

20. Generally the lower classes of people take to the habit of smoking ganja. Charas is very rarely used in these districts. It will not, in my opinion, be very wide of the truth to say that almost the major portion of the rural population of this district, forming especially the lower strata of society, is addicted more or less to the habit of smoking ganja.

21. *Vide* answer No. 2.

23. Bhang is generally used for drinking purposes by people, and largely used by kabirajes (native physicians) for medicinal purposes. It is sometimes, but on very rare occasions, used for smoking also by confirmed ganja smokers, only when, on account of poverty or some other causes, they are unable to obtain the necessary supply of the stronger narcotic, *viz.*, the ganja.

24. The use of bhang is not restricted to any particular section of the community, but the practice of taking it in the shape of confections or sweetmeats prepared with a little admixture of sugar, milk, and other edibles as well as in the form of liquid sherbets, obtains even among the higher orders of society. During the national festivals of Sarasvati Puja, which takes place some time in the month of January, the people consider it to be their religious duty to take bhang in some shape or other.

25. I think the use of these articles is gradually on the decrease. The reason, as I suppose, being that along with the spread of English education the better or more enlightened classes of people are beginning to realize their pernicious effects. Hence their consumption is rarely, if ever, encouraged by the polite society, although the tendency has been to introduce spirituous liquors in their stead to a large extent. The spread of mass education has also had its desired effect inasmuch as it has created a strong antipathy among the lower classes against the use of these drugs.

26. It is impossible to give anything like an accurate information on the subject without the aid of statistics. But roundly speaking, it may be safely asserted that among the classes of people who are in the habit of smoking ganja, those who habitually take it excessively form but a small minority. This, of course, has reference to the ordinary state of things in the society. But it is not unusual to see the peaceful villagers, old and young, including even those who have not as yet been initiated in the habit of smoking, gathered together on special occasions in a common centre with the avowed object of worshipping the Trinath, another name of Mahadeb (the presiding deity of all sorts of narcotics), but with the clear intention of indulging themselves in a sort of nocturnal revelry to give sauce as it were to their dull and monotonous life. It is on such occasions that there is generally a tendency to excess on the part of those who are already habitual smokers, as well as to a gradual and moderate use by those who have not as yet imbibed the habit.

The excessive use of both ganja and siddhi is to be found among certain religious sects and mendicants popularly known as sanyasis. But they are so many itinerant vagabonds not coming within the pale of any society.

27. As already adverted to above most of these men come from the lower orders of society forming the bulk of the artizan and the labouring classes who depend chiefly on manual labour for their subsistence; struggle for life being very hard with them they resort to ganja at first as occasional indulgences only to rid themselves of the fatigue to which they are constantly subject in earning their bread. But in course of time when the habit grows it becomes difficult to shake it off, and then they have to take it as sheer necessity.

28. (a) The average daily cost entailed by a habitual moderate consumer of ganja is very small; one pice a day is quite sufficient in the ordinary cases.

(b) As to the classes of people, who are habitual excessive consumers, some have been known to consume no less a quantity than half a chittack of ganja per diem. This would fix the average daily cost at 8 to 10 annas per head.

29. (a) Ordinarily they mix dried leaves of tobacco with ganja, with no other object but to reduce the strength of the drug. But sometimes they take without mixing it with any other ingredients.

Bhang is generally mixed with milk, sugar and water, and made into a sherbet. But occasionally sweetmeats are prepared with it by mixing with sugar, milk, cocoanut and some spices, with the object of making the thing palatable.

Dhatura is not in common use in this part of the province. It is very rarely used for smoking by persons suffering from asthma, phthisis, and other pulmonary affections with wonderful medicinal effect. But when so taken it is never mixed with any other ingredient. No such preparation as bhang massala is sold in any part of this district.

30. As a rule the consumption of both ganja and bhang is practised in solitude. The use of both these drugs is mainly confined to the male sex, but not to any particular time of life. It is not usual for children to consume any of these drugs.

31. The habit of consuming ganja and bhang is acquired almost as easily as in the case of intoxicating liquors. When once the habit is formed, it is difficult, nay impossible, to break it off as experience shows. Neither of these drugs has any tendency, so far as is known, to drive the consumers into excess.

32. The religious ceremony of the Sarasvati Puja, occurring annually in the month of January, and the festivals of Trinath, already alluded to, have something to do with the consumption of these drugs. The Sarasvati Puja is a well known Hindu festival celebrated throughout the province of Bengal. It is the goddess of learning that is worshipped on such occasions, and the votaries at least in some parts of East Bengal consider it to be a religious duty to take bhang in some shape or other in this occasion in moderate quantity.

The worship of Trinath is of very recent origin; but nevertheless the custom has spread itself very widely into the country. The festival has no particular time fixed for it. It may be celebrated at any day and any hour of the nights at the option of the devotees. Trinath is said to be but another name of Mahadeva, one of the gods of the Hindu Trio. He is said to be the presiding deity of all sorts of narcotics from his supposed liking, according to Hindu legends, for bhang, dhatura

and ganja. No particular form or ceremony need be observed on such occasions, except that a number of persons, generally those who are in the habit of smoking ganja, meet together in a certain place in the village, get a quantity of ganja, the chief article of presentation to the god, together with some sweetmeats and betel leaves and betel nuts, offer them to the deity and then help themselves to these. The ceremony is not unusually attended with songs. But the ganja forms the essential element in this festival. Every one present on such occasions is bound to smoke. To decline is considered sacrilege. It is on these assemblies that many persons imbibe the habit. The devotees in their zeal often run into excess, while the innocent people attending such meetings run the risk of being converted into the faith and of gradually forming the habit.

33. Any one addicted to the use of ganja is looked down upon as morally degraded, although there seems to be no public opinion against the practice in either a social or religious point of view. But such is not the case with regard to the use of bhang, which is a comparatively innocuous drug.

34. To the labouring classes of people, which form the bulk of the ganja-smoking population in these districts, it would be a serious privation to prohibit its use.

35. As regards ganja, though it may be possible by legislative enactment or raising the taxation to control its use to a certain extent, yet it would not be feasible to prohibit its consumption altogether for in that case the inevitable result will be the illicit consumption. The prohibition no doubt will be attended with serious discontent among the consumers, but is not likely to create any political danger. If ganja is prohibited, the consumers will naturally resort to dhatura or some such narcotic drug, but not to alcoholic stimulants, inasmuch as the latter would be more costly luxury.

36. Among the higher classes of people alcohol has to a large extent taken the place of ganja. This is due to the introduction of Western civilization in our society as well as to the outstill system, which has placed liquor within easy reach of every body. That the use of alcohol is really on the increase is evidenced by the fact that liquor shops are now a days to be seen scattered broadcast over the country not excepting even the remote and outlying mufassal stations.

40. Bhang is prescribed sometimes by native physicians for its medicinal qualities, but it is not known to be used in the treatment of cattle-disease.

41. (a) Moderate use of bhang is beneficial in its effects in cases of disorder of the digestive functions;

(b) while ganja used in a moderate quantity, gives considerable relief to those who are fatigued and exhausted under severe bodily exertions. For

this property of the ganja the labouring classes of people consider it to be one of the necessities of their life.

42. Experience shows that those who are in the habit of moderately using either of these drugs do not suffer bodily or mentally to any appreciable extent. It is the excess only that brings on bodily ailments as well as mental deterioration.

43. Yes.

44. Its immediate effect is refreshing. It does not produce intoxication. Instead of allaying hunger it rather sharpens appetite. The effect lasts for a short time, and the after-effect is a slight mental depression. The want of subsequent gratification produces some uneasiness.

45. A very moderate use of these drugs is not known to produce any of these effects.

46. But the excessive habitual use of ganja affects both the mind and the body injuriously. It often brings on insanity, and sometimes causes death by producing dangerous maladies, such as dysentery, asthma and others.

47. It is neither hereditary habit, nor seems to affect in any way the children of the consumer.

51. Necessarily, the moderate use of ganja or bhang has no connection with crime in general, or with crime of any special character.

52. But when excessively used, it sometimes incites people to acts of violence.

53. Yes; in some cases.

54. Not often.

55. When administered in large doses it may induce complete stupefaction, especially in those who are unaccustomed to its use even without admixture.

56. It becomes much stronger in its effects when mixed with dhatura. This is the drug with which ganja is rarely, if ever, mixed by people. The effect of taking such a mixture (a) even moderately is much more pernicious than that produced by it when taken singly. But the use of it in a large dose is attended with dangerous consequences. It acts instantaneously in the brain, and produces temporary insanity. Ganja is generally mixed with tobacco for smoking. When thus mixed it becomes milder in its effects.

67. The incidence of taxation falls rather lightly on the consumers. There is no reason why ganja should not be as highly taxed as the alcohol. An increase in the present amount of taxation may not be unwelcome, as it would augment the Government revenue and at the same time deter many people from ruining themselves by excessive use.

69. The wishes of the people are not consulted by the authorities, while granting license for opening a ganja shop in any locality, nor is it so much necessary, as the existence of such a shop does not in any way interfere with the public tranquillity.

223. Evidence of BABU TARA NATH CHUCKERBUTTY, Brahmin, Government Pleader, Faridpur.

1. In course of my dealings with the inhabitants of the district of Faridpur, I have gathered the information.

2. I think these definitions may be accepted as correct. The names in use in this district are siddhi or bhang, charas and ganja.

3. The hemp plants from which ganja is produced do not grow spontaneously in this district, but bhang plant grows spontaneously.

4. It is known by name bhang plant; it is the male hemp plant.

6. Wild bhang plant grows dense.

7. There is no cultivation of hemp plant in this district.

14. The products (a), (b), (c) are not produced in this district.

18. These three drugs deteriorate by keeping and lose their effects in time. Ordinarily they do not lose their effects within two years.

19. Charas and ganja are used, as far as I know, for smoking only.

20. Generally low class people use ganja. Charas seldom used by the people of this district.

21. Flat ganja is generally preferred here.

23. Bhang not used for smoking.

24. Bhang is very scarcely used for eating, but generally for drinking by a few of the upper class people.

25. I think decreasing, but unable to state any reason.

27. Ganja is generally used by the labouring classes, and also by those who frequent houses of ill fame. Bhang is generally used by people having bowel complaints. Charas is not in use here.

28. Habitual moderate consumers use about 9 pies worth ganja per diem, and the habitual excessive consumers use about 1½ annas worth ganja. Three pies worth of bhang is used by excessive consumer.

29. Tobacco leaves are ordinarily mixed with ganja. Salt, pepper and water are ordinarily mixed with bhang. Sugar is now and then used. Dhatura is not used. Admixtures are for making it more palatable.

30. Ganja is generally smoked in company by the male sex. Prostitutes now and then use it. Bhang in solitude only, generally for medicinal purposes by the male sex. Children never use these drugs, excepting bhang for illness; and that also scarcely.

31. Habit is not easily formed; can be easily left off. There is no tendency to develop into excess.

33. The public opinion is against the consumers.

34. No serious privation to forego their use.

35. It would be feasible to prohibit their use. It would be difficult to consume them illicitly. The prohibition can be enforced by stopping licenses and importation. Will not cause serious discontent. No political danger will follow. Prohibition would not be followed by a recourse to (a) or (b)

36. No.

38. Round ganja not in use here. There is no difference between the other two.

40. Bhang is used by native kabirajes.

42. Moderate use harmless.

43. Yes.

47. These drugs do not produce any hereditary effect.

51. Bad characters use ganja.

53. I know of two or three cases of homicide committed by persons under ganja intoxication during my experience of last twenty years.

62. Wild bhang produced in this district are not used by the bhang consumers, as their quality is not good.

63. I have no objection.

I think bhang should be excluded from the list of excisable articles, as it is generally used in this district for illness only.

64. No, excepting bhang.

65. I think the taxation is good, or else the number of consumers would increase.

66. I think different rates unnecessary.

67. I have no objection to the taxation of ganja and charas, but I think bhang should be excluded.

68. There are no such shops in this district.

224. Evidence of BABU AMVIKA CHARAN MAZUMDAR,* Vaidya, Pleader and Zamindar, Faridpur.

1. As Chairman of the Faridpur Municipality for nearly six years, I have had occasionally to visit ganja shops within the municipal limits, and as a landlord I have frequently come in contact with my tenants belonging to the Chandal class, which supplies the bulk of ganja-smokers in the district. During my fifteen years' practice at the bar, I have besides dealt with some cases in which ganja-smokers were concerned.

2. These definitions may be generally accepted as correct. Siddhi or bhang, charas and ganja are the three narcotic articles obtained from the hemp plant. Siddhi consists of the dry leaves of the male hemp plant. The resin which exudes from the flower and leaves of the female hemp plant is charas. Ganja consists of the dried flowers or flowering tops of the female hemp plant. In this district charas is almost unknown. The flat, the round and the chur ganjas are respectively called chapti, gol and chur ganja. The dry leaves of the wild hemp plant are generally known as bhang.

3. It has been found on enquiry that the hemp plant grows spontaneously in the Dacca and the Rajshahi Divisions, as well as in some parts of the Presidency Division. I have seen it growing in the Backergunge and Faridpur districts. My

information is that it grows abundantly in Rajshahi.

4. Of the hemp plants those that are male, are here called bhang or siddhi, and those that are female are called ganja plants. The two plants are generally distinguished by the following characteristics:—The leaves of the male plants are comparatively broader. Then as flowers appear in the female plants, its leaves begin to fall off by themselves. There is also a kind of siddhi plant which is certainly female, for flowers are seen in them; but no ganja is produced out of these plants.

5. The wild hemp is generally found in comparatively high grounds, but in the midst of pits and hollows where water is seen to accumulate and stagnate in the rainy season.

6. The growth of wild hemp is in some places dense, but is ordinarily scattered.

7. I am not aware of hemp being cultivated anywhere in Bengal for use as siddhi; though it is sometimes seen to grow in the compounds of a man who uses it, and where the refuse are generally thrown. At Naogan sub-division, in the district of Rajshahi, hemp is cultivated under the management of Government for the production of ganja, but neither for charas nor for siddhi as I understand from the local ganja gola.

* Was invited to attend at a meeting of the Commission for oral examination, but failed to appear.

dars. Charas, I understand, is imported from the North-West Provinces, and from Nepal. I am not aware of any place where hemp is cultivated for its fibre or seeds. Seeds are however, I know, preserved by some people, and particularly by native physicians, who generally obtain them from licensed shopkeepers of ganja for medicinal purposes.

8. I am unable to say.

9. All that I know of the method of such cultivation is that the ground is carefully prepared before the commencement of the winter season. The seeds are in the meantime sown in another place where they are allowed to grow. The seedlings are then transplanted to the ground already prepared, somewhat in the same way as boro paddy plants are grown. When the plants grow to a certain height, the male plants are destroyed.

10. Don't know.

11. I am not aware that this is done.

12. I have no reason to suppose this, as I am not aware of the existence of such a practice anywhere.

13. I am unable to answer.

14. As far as I know, ganja is prepared in the Rajshahi Division. I am not aware that bhang is specially prepared anywhere. I do not know anything of charas.

15. The dry leaves of both the wild and the cultivated male hemp are used as bhang, both for eating and drinking, but not for smoking. The methods of such preparations are very easy. When the plants become fully grown up they are cut down and dried in the rays of the sun. Then the leaves are gathered and used as bhang. Ganja is smoked, but neither eaten nor drunk.

16. Yes, bhang is generally prepared by people in their houses. It can be prepared from the hemp plant wherever grown. But ganja and charas, I am told, cannot be prepared from the wild hemp.

17. Can't say.

18. Yes; they deteriorate by keeping. In time they may entirely lose their properties; but it would require a long time to do so. For about two years they remain good with ordinary care. Exposures in open air and water are the general causes of such deterioration.

19. They are also used, though very rarely, for medicinal purposes, the particulars of which are known only to country physicians and quacks.

20. Low caste people, such as Chandals, fishermen, washermen, Chamars, Dhangers, and barbers largely smoke ganja. Mubammadans scarcely use it. Among male adults of these lower classes of people, as mentioned above, about 4 to 5 per cent. smoke ganja.

21. Flat ganja is generally preferred for smoking in this district.

22. I do not know.

23. Bhang is sometimes used for smoking by habitual ganja-smokers, in case ganja is not available.

24. Bhang is used both by the higher and the lower classes of people. The number of habitual drinkers of bhang is comparatively small in this district, and they generally belong to the higher classes.

25. The use of ganja seems to be on the in-

crease as far as the Faridpur District is concerned. It might be apparently supposed that this increase is due to the high price of liquor; but I am not inclined to that view, as the classes of people who now form the bulk of ganja-smokers are not evidently those which previously consumed spirituous liquors in any appreciable quantity.

26. Of ganja—

(a) Ten-sixteenths are habitual moderate consumers.

(b) Two-sixteenths are habitual excessive consumers.

(c) Three-sixteenths are occasional moderate consumers.

(d) One-sixteenths are occasional excessive consumers.

Of bhang—

(a) Twelve-sixteenths are habitual moderate consumers.

(c) Four-sixteenths are occasional moderate consumers.

I am, of course, speaking with reference to this district. I am not aware that there are excessive consumers of bhang, either habitual or occasional, here.

27. From the classes of people as noticed above. Labouring people living in poverty and suffering from depression of spirits are generally led to the use of ganja, first as a stimulant and afterwards as an intoxicant. Persons suffering from rheumatic pains also sometimes take to it as a pain-curer. These people are generally of dirty habits of life. Frequent association with habitual ganja-smokers often leads young men, particularly of poorer classes, to the practice.

28. (a) From two pice to one anna.

(b) Not less than five annas.

29. Tobacco is ordinarily mixed with ganja. Pepper, salt, mouri, and sometimes milk and sugar, are mixed with bhang. The object of these admixtures is either to soften the strength of the particular drug, or to make the preparation delicious. Milk and sugar mixed with bhang increases its intoxicating power. I am not aware that dhatura is ever mixed with any of these drugs, except bhang. I know of no preparation called bhang massala.

30. Three-fourths of the people smoking ganja do so in company, and the rest in solitude. The consumption of bhang I consider to be in inverse proportion. The use of both the drugs I consider to be confined to the male sex. It is not usual for children to consume either of these drugs.

31. The habit is easily formed, but it is difficult to break off. In the case of ganja, there is a tendency towards the excessive.

32. There is one custom which has lately become quite prevalent in this part of the country which largely favours the consumption of ganja. It is commonly called "Trinather mēla." It is not more than twenty years ago that the custom first originated in a village near Poragacha towards the south-east corner of this district. The observance consists in raising a mud vedi or altar to Trinath or Siva, upon which are placed betel leaves with betel nuts, sugar drops, and quantities of ganja. A congregation is formed round the vedi, and songs are sung in honour of the deity. The assembly then smoke

the ganja thus offered to the deity. The consumption of ganja in this connection is often very excessive, and numbers of people who first join this ceremony as curious spectators are converted into hard ganja-smokers.

33. The consumption of ganja is generally regarded as a disreputable and vulgar practice. It is commonly associated with lower classes of people; and the coarseness of the intoxicant, coupled with the depravity which follows its long use and the mental debility arising therefrom, may be taken as the basis of the aversion with which ganja-smokers are generally regarded by the public. I know of no such worship.

34. It would certainly be a privation for some time to the consumers to forego the consumption of the drugs they use. For obvious reasons the privation would be very great, if not altogether serious, in the case of habitual smokers of each class, the precise number of which it is rather difficult to estimate.

35. In places where ganja and charas are not locally produced it might be practicable to prohibit these drugs; but it would be difficult to prohibit bhang, which is extensively produced throughout the country. Such prohibition would, no doubt, create discontent among consumers; but such discontent could hardly amount to a political danger. Prohibition might, however, naturally enough, be followed by recourse to alcoholic stimulants, as all intoxicants are found to be more or less interchangeable.

36. It is sometimes observed that when people are compelled under pressure to abandon the use of any of these drugs, they avail themselves of the earliest opportunity to take alcohol as a substitute. It is the craving of their artificial system, brought on by long use of these narcotics, that lead them always to search for some stimulant. Fancy also leads not a few to court such changes.

37. I have already said that I know nothing about charas; and so I cannot say.

38. None whatever, so long as the exact proportion of the different preparations are maintained.

39. It is for medical experts to express any opinion on this. The visible effects are, however, apparently almost the same.

40. Yes; they are so prescribed, though very rarely, by regular physicians. Quacks, however, prescribe them largely in some cases. I am not aware that they are used in the treatment of cattle disease.

41. To describe ganja as a food would be a clear fiction. It rather impairs the digestive organs. The fact that ganja-smokers are seen to undergo long fatigue, which, under ordinary circumstances, it would be impossible to sustain, is rather due to the dullness of their appetite and the artificial excitement of their nervous system. In the same way madmen often work very hard, yet nobody would suggest that insanity is a motive power, either mental or physical, of human action. The temporary excitement is rather sedative in its after consequences, and in the long run the consumers of this violent drug succumb much earlier than their sober neighbours. Their end is generally very painful and piteous. Bhang, though not a food, when used moderately, is found to be efficacious in chronic diarrhoea and choleric pain as well as some other complaints.

42. I consider the moderate use of bhang to be harmless.

43. The moderate consumers of bhang as well as ganja are comparatively inoffensive to their neighbours. As far as this question is concerned, I rather consider the consumers of alcohol to be a greater nuisance to the public than the consumers of any of these drugs.

44. The immediate effect of the use of bhang and ganja is dimness of sight, palpitation of heart, and a creeping sensation throughout the nervous system. This is followed by a tossing sensation in the brains and vagueness of thought as well as perception. Then intoxication sets in accompanied with a feeling of dull relief. Ganja deadens the appetite, while bhang sometimes creates it. The effect generally lasts from three to four hours, after which there is a feeling of abnormal depression and uneasiness and consequent longing for a fresh dose.

45. The habitual use of these drugs leads to physical deterioration, mental debility and moral depravity. It impairs the constitution and weakens the digestion. Bronchitis and asthma are the never-failing concomitants of such use, which generally terminates in dysentery. It does to a certain extent impair the moral sense, and carried to excess, leads to debauchery, though I must say that ganja-smokers are not often as debauched as consumers of spirituous liquors. It certainly induces laziness, and its worst effects manifest themselves in insanity. In fact, a very large percentage of insane persons is referable to this cause.

47. It does not appear to be hereditary, though children do sometimes acquire the habit from the example shewn by their fathers.

49. Prostitutes of lower order do sometimes smoke ganja, though for what purpose I cannot say. I do not know that the use of hemp tends to produce impotence.

51. A very appreciable proportion of persons of bad livelihood is to be found among ganja-smokers. They easily enter into brawls. I do not think that the use of ganja has any appreciable connection with crime, either general or special, though, no doubt, the people addicted to its use are generally of violent character.

53. I think it does. I know of only one case in which a husband, who had almost turned an idiot under the influence of ganja, killed his wife in a fit of insanity. In the evidence it transpired that this man had on several occasions attempted to throttle innocent children upon no palpable grounds. It is remarkable that little children have generally a morbid dread in approaching a habitual ganja-smoker.

54. This may be said of liquors, but not of ganja.

55. I know of one instance only in which bhang was so used.

56. I am told dhatura is sometimes mixed with siddhi to increase its strength.

57. I don't know.

58. I consider the present farming system to be objectionable. The practice of selling the shops to the highest bidder has a distinct tendency to increase the sale of these drugs.

59. I think it would be an improvement upon the present system to fix the supply for each shop at a maximum quantity, according to the ordinary requirements of each place, and then to pay the vendors at a fixed and uniform rate of commission

upon the sale. The sale prices of different species should also be fixed. By this method the habitual excessive consumption would be greatly minimised without appreciable loss in revenue.

62. I consider it neither feasible nor necessary to control the cultivation of hemp for the production of bhang.

63. Already answered.

64. I have no objections to the regulations as working under the present system. But I do think that charas, not being of such general use as ganja and bhang, ought not to be exported outside its native districts.

65. Yes; I think it is. In this connection I would take the liberty to add that the proposal made in certain quarters for taxing tobacco is unseasonable and improper in the extreme. Such a taxation would prove highly oppressive to the people. Besides, it would be unjust to punish a large number of innocent persons for the vicious habits of a few men.

66. The rates of taxation should vary in proportion to the difference in strength between these different kinds of the drug.

67. I cannot say that I have any.

68. There are in this district no licensed dens, as they are called, though I have reasons to suspect that consumptions are generally allowed on the premises of the licensed vendors. The licensed houses, wherever they may exist, should be closed, and the practice to which I allude should be vigilantly watched and vigorously put down.

69. It is to be deeply deplored that there is no local option in the opening of these shops. They are generally opened upon application of professional men and police report, which absolutely means nothing. I am strongly of opinion that intelligent local public opinion should always be considered in these matters.

70. I don't know.

225. *Evidence of* BABU BHUVAN MOHUN SANYAL, *Brahmin, Government Pleader, Purnea.*

1. I have framed my answers from my own experience of what I have seen and from information obtained by inquiries especially made for the purpose.

2. I think the definitions quoted may be accepted for Bengal. Dry leaves of hemp plant is ordinarily known in this district as bhang. The word siddhi is applied to the plant only by the Bengalis, who form a very small portion of the people of the district. It is not generally known by the names of subji or patti here. The name charas is applied to the preparation described here as such. Flat ganja and broken ganja are generally used by the people of the district. Flat ganja is ordinarily called here thal ganja; it is also known by its vernacular equivalent chipta ganja; when the twigs of the same are small, it is called pungri; round or chur ganja is locally known as such.

3. The plant grows spontaneously in several districts of Bengal. I have seen it to grow in the districts of Jessore, Nadia and Purnea. In Purnea it is abundant.

4. The plant that grows spontaneously in this district is generally known as bhang plant and sometimes as siddhi plant. Both the names refer to the same plant. But in some districts of Lower Bengal I have heard people making a distinction between the two: they would apply the word siddhi to a plant the leaves of which are milder in effect than those of the plant known there as bhang.

5. I have not made a special study of the matter, but as it grows wild abundantly in this district, especially in the Sudder sub-division, where the soil is generally light and sandy and the climate damp and malarious, I would consider such soil and climate to be suitable to its growth.

6. Its growth is rather dense than scattered.

7. There is no cultivation of the plant in this district for any of the purposes mentioned or for any purposes whatever. The plant is cultivated in the district of Rajshahi and Bogra under Government supervision.

8 to 11. I would not undertake to answer the questions.

12. My answer to the first question is "no." I am unable to answer the last question.

13. Yes, it is restricted to the districts of Rajshahi and Bogra, I believe. I do not think there is any part of Bengal which I know, where the cultivation of the plant would be impossible.

14. Ganja and charas are not prepared in this district. Some people preserve dried leaves of the plant growing wild and use the same as bhang; they are not ordinarily sold in the district. I have, however, heard that bhang is sometimes taken to the neighbouring district of Bhagalpur, but not to a great extent.

15. Bhang leaves from mature plants growing wild are dried up in the sun and preserved for use. It is generally used as a drink. The dried leaves are pounded in a mortar with a pestle or rod along with a few black-peppers (sometimes other spices, sugar, and milk are also added) and mixed in water. The whole is made into a thin drink. Some up-country people as well as a few natives of Bengal sometimes eat a kind of sweetmeat (called majum) in which bhang is used in some form or other. Bhang is sometimes prescribed by kabirajes (native physicians) as medicine for diarrhoea; it is then ordinarily used in the form of pills. I have never seen bhang having been smoked, though I have heard of the same.

16. Bhang is generally prepared by the people in their own houses. It is said that it can be prepared from the hemp plant wherever grown.

I hear that ganja cannot be prepared from the hemp plant generally growing wild in the district. I have, however, heard that it can be prepared from a plant sometimes seen (though very rarely) growing wild and known as ganja plant.

17. The bhang is prepared in the district generally by the people who use them. They are principally Hindus of the middle and upper classes coming from up-country.

18. Ganja and bhang are both said to deteriorate by keeping for a long time, and thereby they lose their effect. Ganja can keep good for one year if kept with ordinary care. Bhang deteriorates after five or six months, but I have heard that old bhang is preferred to new bhang for

medicinal purposes. It is said that they generally deteriorate by being exposed to air. To preserve them, they should be kept in a dry and air-tight place.

19. Ganja is principally used for smoking, but I have seen some medical men prescribing a preparation of it as medicine for dysentery. It has been so used in a case occurring in my family. It is used by doctors in the form of tincture or extract. Ganja pounded and mixed with oil is sometimes used as an external application for skin diseases. I have heard that it is sometimes used by some people as medicine for diarrhoea; it is then used mixed with opium. I know nothing about charas.

20. In this district ganja is largely used by the lower classes of the people, such as coolies, beldars, palki-bearers, guries (fishermen), and the like, as well as by sanyasis and fakirs. The number of Hindu consumers is much larger than that of the Muhammadan. It is used more extensively in villages than in towns, the people in towns preferring alcohol and opium. The use of the drug is nearly confined to males; very few females use it. The number of the female consumers would not be, in my opinion, more than one per cent. It is very difficult for me to give the proportion of the people who use the same.

21. Chur and flat are prepared for smoking.

22. I know nothing about it; it is scarcely used in this district.

23. I have heard that it is so used, but I have never seen it so used.

24. Ordinarily up-country people, Hindus of superior castes, such as Brahmins, Chetris, etc., use it as a drink. Town people use it more than villagers. The number of consumers is very small. I am unable to give the proportion of the consumers.

25. The use of ganja and bhang is not on the increase; it is rather on the decrease. I would attribute the decrease of the use of ganja, first, to the gradual increase of its price (the present price is considered almost prohibitive by consumers, who are generally poor people); second, to the present system of outstills prevailing in the district, which offers an inducement to people to get spirits at a very low price.

As to the decrease of the use of bhang, I would attribute it to a fear entertained by the people of being prosecuted for preparing it from wild plants of hemp growing in the district. It may also be attributed to the outstill system.

26. I am sorry I am unable to answer these questions satisfactorily.

27. Ganja.—(a) Habitual moderate consumers are principally taken from the labouring classes, such as coolies, beldars, etc.

(b) Habitual excessive consumers—sanyasis, fakirs, &c.

(c) Occasional moderate consumers. } From all classes of people.
(d) Occasional excessive consumers. }

The habits of life of—

(a) Generally active and laborious.

(b) Indolent, worthless.

(c) and (d) Nothing particular can be said by me as to their habits of life.

Association with habitual consumers generally

leads to the practice. It is sometimes had recourse to under advice and recommendations of friends.

I need not say anything in particular on the subject about bhang; it is very rarely drunk in excess, and consumers have very little peculiarities about them.

28. Ganja.—(a) Allowance not more than one-eighth of a pice in weight, and cost about a pice. (b) Allowance not less than a pice in weight, and cost two annas.

29. Ganja.—(a) Ordinarily dry tobacco leaves are mixed with ganja when smoked. (b) Exceptionally opium is mixed when taken as medicine for diarrhoea. I am not personally aware of dhatura being mixed with it, but I have heard it stated that a hard smoker would sometimes mix dhatura with it to produce a stronger and more lasting effect as an intoxicant.

Bhang.—Black-pepper and anise are ordinarily, and milk and sugar are exceptionally, mixed with it. These are mixed with it to make it an agreeable drink, producing a stronger effect as a narcotic.

I am not aware of any preparation which is sold for the purpose of being mixed with any of these drugs.

30. The consumption of ganja is ordinarily practised in solitude and sometimes in company. It is mainly confined to the male sex and to the adults and old men. It is not usual for children to consume it. Bhang is used more in company than in solitude. It is also mainly confined to the male sex. Children also sometimes use it, though not to the same extent as the adults and the old men.

31. Ganja.—I do not think that the habit is easily formed; it is rather formed by constant association with consumers (habitual) and by constant use. In my opinion it is difficult to break off the habit when once formed. In the ordinary course of nature there must be a tendency for the moderate habit to develop into the excessive. This is especially the case with higher classes of people.

Bhang.—I have seen very few persons who are habitual consumers of the drug. I am therefore not prepared to make the above remarks with regard to it.

32. I know of one such custom regarding the use of bhang prevailing amongst the Hindus, especially of the higher classes, in Lower Bengal. They consider it to be either a religious or a social one. On the last day of the Durga Puja in the evening (Dasera) the different members of a family take a small quantity of the drug (called by them siddhi) in the form of a drink especially prepared for the occasion. They think that the use of the drug would bring prosperity on them. The word siddhi signifies welfare. The use of the drug in connection with the custom is regarded by the orthodox Hindus, especially by women, as essential. The use of the drug on the occasion is generally temperate. It is not likely to lead to the formation of the habit.

33. The consumption of ganja is generally regarded as something bad and demoralizing. I am not aware of any public opinion, social or religious, in regard to the practice. The public generally attach shame to its use: they look down upon those who consume the drug; the very word ganja-khor (consumers of ganja) is a word of reproach. The sentiment entertained against the

consumers is attributable principally to the disreputable life and bad character of the majority of the habitual and excessive consumers.

I am not aware of any custom of worshipping the hemp plant on any occasion by any class of people.

34. In my opinion it would be a serious privation to habitual consumers of ganja, both moderate and excessive, to forego the consumption of the drug.

In case of moderate consumers of ganja of the lower and labouring classes, the use of the drug enables them to undertake difficult and laborious works without feeling much fatigue. In case of the excessive consumers of the drug, a giving up of the habit may produce serious diseases.

I am sorry I am unable to give the probable numbers of each class; the number would, however, be very small.

35. Under the present state of affairs, I would not consider it feasible to prohibit the use of the drugs. A prohibition may lead the consumers to consume it illicitly. Besides, it is likely to drive them to the use of more harmful intoxicants, such as alcohol and dhatura. Ganja is certainly bad, but alcohol is worse. I doubt not a prohibition of the use of the drugs would occasion serious discontent among the consumers, though I am not prepared to go to the extent of saying that the discontent may amount to a political danger.

36. There is reason for thinking that alcohol is now being to a certain extent substituted for both ganja and bhang. I would attribute this change to the following causes:—

1st.—Introduction of the outstill system.

2nd.—Increased duty levied on ganja.

There are people who are now using spirits purchased cheap from outstills who formerly used to smoke ganja obtained at a low price.

37. I am unable to answer this question.

38. No, as far as I have been able to ascertain.

39. I am unable to answer this.

40. Some preparation of bhang are prescribed by kabirajes (native physicians) as medicine for diarrhoea. It is stated that ganja is also used as medicine for diarrhoea mixed with opium. It is also used mixed with oil as an external application for skin diseases. I have seen it so used. I am not aware of the drugs having been used as a medicine for cattle disease.

41. Ganja.—(a) I cannot say.

(b) Moderate use of the drug may be beneficial in its effects, as it gives staying-power under severe exertion or exposure or to alleviate fatigue. I have personal experience of this matter in the case of paliki-bearers.

(c) I have often observed that ganja-smokers are generally free from malarious fever. From this I conclude that it is a febrifuge, but I don't think anybody uses it as such.

Bhang.—(a) A moderate use of bhang is considered to be digestive; it is said to increase appetite. A moderate use of the drug may therefore be beneficial.

The majority of the labouring classes, who use ganja, use it for the purpose of keeping up staying-power under severe exertion. A small proportion of the people who use bhang use it for increase of appetite. I refer to moderate use of the drugs both habitual and occasional.

42. Though I have stated that a moderate use of ganja may be beneficial in certain cases and under certain circumstances, I do not consider it altogether harmless. I may say that a moderate use of bhang is harmless. In the case of ganja, the consumers are liable to attacks of dysentery and such like diseases.

43. Yes; they are generally inoffensive to their neighbours.

44. I have been told by several moderate consumers of the drugs that the immediate effect is a pleasing sensation (ganja is therefore jocosely called *Turitananda*). It is refreshing. It does not produce intoxication in the case of habitual consumers. In case of bhang it creates appetite. The effect of the use is longer in cases of bhang than in cases of ganja. The effect in cases of bhang may last twenty-four hours, whereas in cases of ganja it does not generally last for more than a few hours. The after-effects in the case of ganja is rather depressing. It is not so in the case of bhang.

45. Bhang.—My answer is "no" to the questions.

Ganja.—The habitual moderate use of the drug I think produces physical noxious effects. It does impair the constitution in the long run. It may cause dysentery, bronchitis or asthma after use for a long time, especially in the cases of those who live poorly.

46. Ganja.—The habitual excessive use of the drug produces noxious effects, physical, mental and moral. It impairs the constitution of the consumer. It causes dysentery, bronchitis and asthma. It impairs the moral sense and induces laziness. It deadens the intellect and produces insanity, both temporary and permanent.

47 and 48. No.

49 and 50. I am not aware of any such use.

51. A good portion of bad characters are known as habitual moderate consumers of ganja. I have often come across cases in my experience as a public prosecutor in which the offenders were known to have used either ganja or alcohol before the commission of the offence.

52. I believe an excessive indulgence in ganja incites to unpremeditated crime. I know of no cases in which it has led to temporary homicidal frenzy.

53. Ganja is used by criminals to fortify themselves to commit a premeditated act of violence or other crime, such as dacoity, robbery, etc.

54. I have never heard of cases in which this was done.

55. Bhang, when used as modified by the admixture of substances, such as sugar, milk and spices, produces stronger and more durable effects than when used alone.

56. I cannot answer this question.

57. I think the present system of excise administration in respect of the hemp drugs is working well on the whole.

58. The hemp plant is not cultivated for production of bhang in this district, but its cultivation should not in my opinion be controlled in any way.

59. I have no objection to the present system of wholesale or retail vend of ganja. To my knowledge charas and bhang are not sold here.

60. I think the duty levied on ganja is very high with reference to alcohol. I would suggest

an increase of duty on alcohol, which is undoubtedly greater of the two evils. The change may act beneficially in the interests of morality.

66. In my opinion it is necessary that there should be different rates of taxation for different kinds of ganja. Chur or broken ganja should fetch highest duty as it contains no twigs.

67 and 68. No.

69. The police is asked to report before a shop is opened in any locality. I think local opinion should be considered on the subject.

70. Answer is "no" to the first and last questions. Duty is, I believe, really paid in respect to ganja used in this district.

226. *Evidence of BABU AMRITALAL RAHA, Kayasth, Pleader, Judge's Court and Talukdar, Khulna.*

1. I have taken some interest in this matter, and hence by observation and by collecting information, I have come to know the matters in regard to which my answers have been framed.

2. Most of these definitions may be accepted for my province.

3. My information is that bhang grows spontaneously in all the districts of Lower Bengal. I am told that in some districts ganja grows spontaneously.

4. Bhang and siddhi are known to be the same thing. They refer exactly to the same thing, the difference being that bhang, when dried up, is generally called siddhi, but bhang in its undried state is never called siddhi in this part of the province.

5. Wild hemp generally grows on low lands.

6. The growth of wild hemp is generally dense and sometimes scattered.

7. As far as I know, there is no cultivation of hemp plant in this part of the province.

10. No, they do not. They are of the same classes as other agricultural cultivators.

13. (a) No. The cultivation is not common to all districts.

(b) I do not think so.

(c) I do not think so, as I have seen wild ganja plants grow in some places in my district.

16. (a) Yes.

(b) Yes.

(c) Yes.

17. By low class people.

18. Yes, it does. No; it does not quite lose its effects. With ordinary care, it keeps good for six months and sometimes for one year. Damp is certainly one of the causes, but I do not know of any other cause. One ganja-smoker has told me that exposure to air deteriorates the narcotic effect of ganja. I think that if it be kept air-tight deterioration may be prevented.

19. Ganja is generally used for smoking purposes, but it is sometimes used for medicinal purposes.

20. Low class people smoke ganja. It is rarely used by high class people. The proportion is in my estimation two per cent. Charas is smoked by people of both the classes. The proportion, according to my information, is very small, say one to a thousand. There is no particular locality, but, on careful observation, I have found that the low class people of the up-country are more addicted to ganja-smoking than that of the lower province of Bengal.

21. Both.

23. Bhang is sometimes used for smoking by

ganja-smokers, when they have not ganja at their disposal. I am told that in rare cases people out of curiosity use bhang for smoking. This is done by people of low class generally.

24. Some females of up-country eat bhang. Both high and low class people drink bhang. It is not confined to any particular locality. The proportion may be two per cent.

25. To the best of my information the use of ganja and bhang is on the increase. The only reason for this that I have been able to ascertain, is the abolition of the out-still system. This system created a good number of drunkards almost in all the villages, as the country liquor was sold at a very low price. Now that the liquor is no longer available at low price, these people have mostly resorted to the use of ganja and bhang.

27. Labouring classes are habitual moderate consumers of ganja. Vagabonds and low-lived people are habitual excessive consumers. People of high class are occasional excessive consumers.

28. (a) One anna per diem (ganja-smokers).

(b) Four annas per diem (do.).

31. (a) Yes.

(b) No.

(c) Yes.

32. In some part of this province bhang is taken or rather drunk by people of all classes in small doses on the Dasera day, i.e., the day on which the Durga Puja ceremony comes to a close. This use of bhang is not essential. It is generally taken in such small dose that it can never lead to the formation of the habit. It is not otherwise injurious.

33. Bhang drinking is scarcely taken notice of, but the consumption of ganja and charas is generally regarded with hatred. The public opinion (social) is everywhere strong against it. The sentiment may be attributed to the fact that the ganja and charas smokers are always low-lived, have scarcely any sense of honour or of duty, are victims of many filthy diseases and generally meet with early death. I am not aware of any custom of worshipping the hemp plant on certain occasions by certain sects of the people.

34. To those who drink bhang for medicinal purposes, I think it would be a serious privation to forego the consumption of the drug. To ganja and charas smokers it would be a privation, no doubt, for some time. The bhang-drinkers are likely to suffer in health and spirits if they are to forego its consumption. The ganja and charas smokers will feel some difficulty for a number of days, but afterwards they would be gainers in health, so the foregoing of its use will be of no privation to them.

35. I do not think it feasible to prohibit the use of bhang, as it is sometimes used or drunk for

medicinal purposes, but I think the use of ganja and charas can be feasibly prohibited. It may be consumed illicitly. Certainly the prohibition will occasion serious discontent among the consumers. Such discontent can never amount to a political danger. I think where the means will allow, prohibition may be followed by recourse to alcoholic stimulants. But as the people who smoke ganja and charas are generally poor, there is not much reason to apprehend this.

36. No.

37. Ganja-smoking has earlier effect than charas-smoking.

38. Yes.

40. Kabirajes prescribe bhang for certain diseases. Bhang is used in the treatment of cattle disease.

41. (a) Bhang is beneficial in its effects as a food accessory or digestive.

(b) To habitual consumers ganja may alleviate fatigue.

(c) It is never used as a febrifuge or preventive of disease in malarious and unhealthy tracts.

I refer to moderate occasional use in (a), and moderate habitual use in (b).

42. I do not think so. Use of any of these drugs is likely to tell on the health of its consumers.

43. Yes.

44. (a) The effect is imperceptible.

(b) Yes.

(c) Yes.

(d) No.

(e) Yes, to habitual consumers.

(f) From three to six hours.

(g) Yes, the consumer feels languid and uneasy.

(h) Yes, it does.

45. (a) Habitual moderate use of ganja and charas produces noxious effects, physical and mental.

(b) Yes.

(c) Yes.

(d) Yes.

(e) It induces laziness and habits of immorality to a certain extent.

(f) It deadens the intellect. Moderate use of ganja scarcely culminates in insanity, temporary or permanent.

46. Habitual excessive use of ganja and charas generally produces insanity, either temporary or permanent.

47. No.

48. The children of the habitual excessive users of ganja and charas are affected by the habits of their parents.

49. Ganja and charas are used by prostitutes. The moderate use of hemp does not tend to produce impotence.

50. The excessive use of hemp tends to produce impotence.

51. No.

52 and 53. Yes.

54. Not always, but sometimes.

55. (a) Yes.

(b) Yes.

62. No; the cultivation should not be controlled. It will not be feasible.

68. In my province there are shops for the sale of these drugs. They may be consumed on the premises. The premises of these shops should never be allowed for consumption of these drugs.

69. The wishes of the people are never consulted or considered in any way before a shop is opened in any locality. Certainly in a matter like this, the local public opinion should always be taken and considered.

227. Evidence of BABU PARES NATH CHATTERJEE, Brahmin, Pleader, Satkhira, Khulna District.

2. Yes, in the Satkhira Sub-division the three narcotic articles obtained from hemp are known as sidhi, charas and ganja.

20. Fishermen (Jelias, Tiors, Bagdis, etc.), Kahars, Mehtars, Domes, Bunas (coolies), san-yasis and fakirs (Hindu and Muhammadan friars) are ganja-smokers. Nearly 60 per cent. of the above smoke ganja, but those who live near a zilla or sub-division, i.e., in a place where ganja is easily available, are proportionately greater smokers than those who live in the interior.

21. In this part of the country the round ganja is preferred.

23. Bhang is sometimes used for smoking when ganja is not available.

24. Nearly 90 per cent. people of the North-Western Provinces drink bhang, but in Bengal only two per cent. drink it.

25. The use of ganja and bhang is on the increase.

28. The average cost of ganja-smokers is from one anna to two annas per diem. The average cost of bhang-drinkers is from two pice to four pice per diem.

29. Raw tobacco is generally mixed with ganja. Dhatura is never used.

30. Women, except prostitutes, and children never use to take any of these drugs.

31. The habit is not easily formed, but when it is once formed it is very difficult to break it off.

32. In the Hindu community bhang is drunk on the bijaya of the goddess Durga, i.e., on the day when the idol has been thrown into water. It is a social custom.

40. Yes; bhang is prescribed by native kabirajes for many diseases. They also use it to prepare many medicines.

43. Yes; they are inoffensive.

51. Nearly all bad characters are habitual moderate consumers. Robbers, dacoits, etc., before they commit any crime, prepare themselves by smoking ganja.

54. Yes; criminals by taking one of these drugs fortify themselves before they commit any crime.

69. No. Government ought to consult the opinion of the people before a shop is opened in any place. Generally a petition is sent to the Excise Collector, and a shop is opened.

228. *Evidence of* BABU JADUBANS SAHAI, *Pleader and Vice-Chairman, Arrah Municipality.*

1. The replies are based on personal experience and information, as well as on facts derived from enquiries from consumers, vendors, and other people likely to know about the subject.

2. The definitions, as given by Dr. Prain, may be accepted for Behar. The following are the Hindi names popularly used in the province by commoners:—(a) bhang, (b) sabzi, (c) patti, (d) siddhi, (e) buti, also known as “Sheuji ka buti”, i.e., a drug by which the god Siva is propitiated, and which is the favourite drink of the god Siva.

The other names applied to this drug by the more refined and literate classes are:—(a) bang (Persian for bhang), (b) falak sair, (c) varakul khyal, (d) varakul kunb.

(b) and (c) are poetic designations of bhang, which connote the effects produced by the drug. (c) is composed of varak (leaf) and khiyal (imagination), i.e., a leaf which assists the imagination. It is a well-known fact that during the influence, one's ideas are fixed on a particular object, and for the time being the mind is totally absent from other objects, hence the drug is used by jogis to assist them in their contemplation. (d) is composed of falak (sky) and sair (walking). This designation indicates the effect of the drug in fixing the imagination upon sublime things and literally means a thing that causes the mind to travel in the sky.

There are no other names for ganja and charas.

The varieties of ganja are known by the following names:—(a) chur (broken), (b) chipta (flat), (c) gol or pamri (round).

3. Hemp grows in all the districts of Behar, Patna, Gaya, Shahabad, Muzaffarpur, Darbhanga, Saran, Champaran, Monghyr and Bhagalpur. In the last six it grows with more or less abundance.

4. Hemp has two names—(a) ganja, (b) bhang.

5. Damp and moist climate and loose soil.

6. Dense.

7. Not in my province.

8, 9, 10, 11, 12, and 13 require from me no reply as there is no cultivation in my province.

14. Bhang is prepared in these provinces, and not ganja or charas.

15. Ganja or charas not prepared in my province, hence the method of preparation cannot be precisely stated. For bhang see 16.

16. Yes, bhang can be prepared from the hemp plant wherever grown, and is generally prepared by the people in their houses. Not so ganja and charas.

17. By all classes.

18. Ganja and bhang, and, so far as my knowledge goes, charas as well deteriorate by keeping, and lose their effect in time. They can keep good with ordinary care for a year or a little over. Damp and exposure are considered as the main causes of deterioration. Keeping in dry places and preservation from exposure, may prevent the deterioration.

19. Ganja and charas are generally used for smoking only. The former sometimes used by Hynodedic physicians in the preparation of medicated oils for skin diseases. Charas never so used.

20. Charas is used by a few people in these provinces in the larger towns by disreputable classes. Ganja by almost all the classes, rich people among the high class being not free from its use. It is mostly used by Rajputs, Brahmins, palki-bearers, and labourers, but the jogis and nagas are specially votaries of this drug.

21. Flat ganja is preferred.

22. Foreign charas is used, imported from Amritsar in Punjab.

23. Never.

24. Bhang is generally used in this country by all classes, to whom the use of spirituous liquors is prohibited by religion or family superstition and prejudice, such as Brahmins, Rajputs, and Bhuniars. Pandas of temples are habitual and excessive consumers of bhang. But its use is by no means restricted to any particular class, and Muhammadans, though not in the same proportion as Hindus, also use bhang, although strictly prohibited by their religion. More than a half of the adult male population in each locality use bhang.

25. This is a statistical question altogether; but the use of bhang appears to be on the increase, owing to the increase in price of wine.

26. This is also a question of statistics, but I guess the proportion as follows:—

(a) 20 per cent.

(b) 15 „ „

(c) 50 „ „

(d) 10 „ „

27. *Vide* answers to questions 20 and 24.

28. (a) Ganja—Allowance, 10 grains; cost 8 pies. Bhang—Allowance, 45 grains; cost $\frac{1}{2}$ anna.

29. With ganja khaini or dry leaf of tobacco is ordinarily mixed. Keora and atar are used to perfume it, when used by the high class people who are rich enough to afford. With bhang pepper is ordinarily used. In exceptional cases milk and sugar with other spices are mixed to add flavour and to mitigate its heating effect. Sugar, however, increases the intoxication. The use is confined to the male sex except in cases of prostitutes.

Bhang massala—(a) sonf, (b) pepper (black), (c) cucumber seed, (d) kakri seed, (e) kharbuza seed, (f) kahu, (g) kurfa, (h) rose leaf, (i) chota ilachi (small cardamom), (j) kasni, (k) almond (increases intoxication).

30. Alone as well as in company by males, females (prostitutes); not by children.

31. Yes, easily formed, and it is difficult to break off; and the tendency in the case of each drug is to develop into the excessive.

32. Following festivals:—Holi, Dasahra, Sivaratri, Basant Panchmi.

The use is excessive or moderate according to the habits of consumers.

33. The public consider the use of ganja and charas as disreputable. Votaries of Siva consider it generally necessary to take ganja or bhang. Indulgence in these drugs makes one unfit for active life unless he get rich and substantial food. The hemp plant is never worshipped.

34. It would be a privation to suddenly forego the consumption to all consumers, specially to sadhus who are supposed to derive material help in their jog-sadhan and in concentration of mind.

35. It is quite possible to prohibit the use of charas, specially in Behar, inasmuch as it is used by a small number of people, and that in towns alone, and very rarely indulged in by the respectable class. There is no likelihood, in the case of charas, of its being illicitly used as it is not a local preparation and has only to be imported; and if its use is prohibited, there will be little or no danger of smuggling. The case is quite different with ganja and bhang. The consumers are numerous and they are used invariably and unexceptionally by sadhus, who are notoriously held in high reverence by the people generally. The prohibition may come to be regarded as interference with their religious liberties, and a colourable interpretation might be put, which might cause political danger. The illicit use of bhang can never be prevented. It grows wild in every district of Behar, and an effort to practically enforce the prohibition might give those, to whom the duty is entrusted, a handle for oppression. Most probably the prohibition will be followed by recourse to alcoholic stimulants and other drugs. It may not therefore be feasible to prohibit the use of ganja and bhang, and it cannot but cause discontent if not political danger.

36 and 37. I believe so, as the use of alcoholic stimulants is gaining ground as the trammels of superstitions and prejudice are being shaken off under the influence of English education, and although at present wine is used illicitly by those to whom the use is prohibited by religion, social restraints are being gradually removed.

38. No.

39. Ganja or charas never eaten or drunk.

40. Old bhang is often used by hakims and vaidas to cure stomach diseases; it is also administered to cattle and horses to ward off the effects of cold.

41. Moderate use gives a staying-power under exertion and wards off the effects of exposure. The use of these drugs is sometimes considered as a febrifuge in malarious or unhealthy districts, but I am not sure how far this belief is grounded on actual facts.

42. Moderate use of bhang has not been known to do much harm, but ganja and charas are very mischievous, specially in case of weak-brained men.

43. No, not by itself.

44. Refreshing, produces intoxication, creates appetite. The after-effects are yawning, joint-aching, lethargy. Want of subsequent gratification produces longing and uneasiness.

45. (b) Does impair the constitution, if not accompanied by substantial food.

(c) Causes loss of appetite in the long run.

(d) Ganja has been known to cause bronchitis and asthma.

(f) Ganja hardens the intellect and produces insanity of a violent type though generally of a temporary character.

46. *Vide* last portion of No. 45.

47 and 48. No.

49 and 50. I believe that although long and habitual use of any drug in a very moderate quantity may not be very prejudicial, yet these drugs are not unfrequently used to enhance the

power of sexual intercourse; and the temporary excitement induces a morbid habit and leads to excessive indulgence, and may in that way bring on impotency, if nutritious food is not taken to counteract the effects of the excess and sustain the power. It is used by prostitutes.

51, 52 and 53. No.

54. Yes, may be used by criminals to fortify their nerves before the commission of crimes, but use of drugs for such purposes is less frequent than that of wine.

55. Yes, criminals do induce their victims to partake of these drugs, but complete stupefaction cannot be effected in each case without admixture. Bhang may bring on complete stupefaction even in strong brains, if the drug is boiled with current pice or copper or mixed with dhatura.

56. The effect of bhang is increased by boiling with pice and mixing with dhatura, and that of ganja by mixture with khaini. Cannot say any thing about charas.

57. I do not think they are ever eaten or drunk.

Oral evidence.

Question 1.—My age is nearly 33. I am Pleader and Vice-Chairman of the Arrah Municipality. I left college in 1883 or 1884, and have been practising since 1886 as a Pleader.

Question 45.—In cases of naturally weak intellects, ganja, even used in moderation, may cause temporary insanity. With this exception the remark I have made under 45 (f) as to insanity resulting from ganja applies only to the excessive use. I know one case of a weak and ill-nourished man whose insanity was attributed to ganja, and he did not take it to excess. So many causes may be working at one time to cause insanity that we cannot confidently assign one cause, and therefore I use the word "attributed."

Question 54.—A person intending to fortify himself to commit a crime is likely to make use of the intoxicant to which he is accustomed. And those cases in which spirits have been used, have come to my notice more frequently than cases in which the hemp drugs have been used.

Question 69.—Local opinion is never, as far as I am aware, consulted in the location of shops. On one occasion, I moved the Collector to change the site of a liquor shop which caused obstruction, and the Collector wrote to me to select a new site in consultation with the Excise Deputy Collector. So far as I know, no letter has been sent to me consulting me as to the location of the liquor shops for the year; but I do not like to commit myself on the point. I think the only way to get local opinion regarding the location of ganja shops would be to consult Local and District Boards. These bodies are likely to represent the ideas and wishes and interests of the rural population, and I think they generally would do so. The practice would differ from the theory, however, in some cases, but we are bound to suppose that this would be the case. Certainly the gentlemen who sit on the Boards would not represent the views of the kahars and similar low castes who consume the drugs. Such classes are not, in my opinion, competent to judge of the mischief which the drug may do them. The Local Boards might set themselves to ascertain the views and wishes of the consumers, and in that case would be a sufficient representation of them.

229. *Evidence of* BABU GOWREE SUNKER ROY,* *Kayasth, Secretary, Cuttack Printing Company, Cuttack.*

1. Long contract with persons who use the drugs and general observation.

2. Yes. The local names are charas, ganja, and bhang or patti; the ganja being of two sorts, desi or Gurjati (grown in the Tributary Mahals) and Calcutta (imported from Bengal). The distinction between flat, round and chur is not much recognized by the people here.

19. Yes, but charas is almost out of use at present. In rare cases ganja is powdered and eaten with sweetmeat.

23. No.

28. (a) One pice or three pies.

(b) About one anna.

29. (a) Tobacco leaf. (b) I am not aware of any.

The chief or indispensable ingredients of bhang massala is black-pepper (golmirich); other spices, such as aniseed, mace, cloves, etc., are added according to taste.

30. Only ganja is smoked in company by male adults; children do not consume any drug.

31. Yes, and it is as easily shaken off. There is no such necessary tendency unless a man chooses to go into excess in the case of ganja-smoking only.

32. The only religious custom among the Bengalis is to take a little bhang on the Bijaya day (last day of Durga Puja). There is no such custom in Orissa. Where the custom prevails it is used very moderately, and it is not likely to form a habit or inflict any injury.

36. None at all, and it is not likely, because alcohol is too expensive and forbidden by Hindu religion. On the contrary, some persons resort to hemp drugs to give up liquor-drinking.

37. Charas, as stated above, is not now used. The effect of ganja-smoking is immediate but transient, while the intoxication of bhang lasts for twelve hours or so.

39. Only ganja is used in smoking, and I believe it is more injurious than drinking or eating bhang. I think ganja-smoking affects the lungs, for I have seen persons using it excessively, constantly coughing and throwing off thick mucous matter. I also know of two persons smoking ganja habitually turning insane.

40. Bhang alone is used as a medicinal drug by all native physicians without distinction. I am not aware of its being used for cattle disease.

41. (a) It is generally believed that the use of ganja or bhang promotes hunger and helps digestion.

(b) I have seen that paliki-bearers, boatmen, etc., who use ganja are able to do their work

well after taking a dose when required to work extra hours.

(c) and (d) I have no special knowledge.

42. I consider the moderate use of ganja or bhang harmless, especially the latter. Bhang is preserved by many as a household medicine for all sorts of bowel complaints and colic pain, and as a cooling beverage in the hot season. Indeed, some go so far as to say that the restriction of the sale of bhang by the Excise Department has deprived many of a ready cure in cases of bowel complaints and even cholera. This popular belief and undue restrictions of the department help, I am afraid, to keep up the illicit trade in bhang.

44. Persons using ganja or bhang say that they feel refreshed after taking a dose, and complain of want of appetite and dullness if kept long without it. My observations lead me to think that the intoxication must be of a mild nature, as the generality of ganja-smokers look calm and talk properly when under influence of the drug, and the want of subsequent gratification does not seem to produce any unbearable uneasiness.

45. I am not aware of any such effects.

46. I have already said I know of two cases. In one case the ganja-smoker, a tailor, used to get periodic fits of insanity lasting each time for a week or so, at intervals of two or three months. After some years the fits came at longer intervals till he died at the age of about 40 years. The other ganja-smoker was a moharrir in the court. He suddenly resigned his post and became insane. After a few months one of his friends kept him in custody in his house for two or three months and was not allowed to smoke. He got well. One day he went out and smoked ganja and became as insane as before. He is still alive and lives by begging.

47 and 48. I have no reason to think so.

49. I cannot say; but I know that several native medicines directed to that end contain bhang as one of the chief ingredients. Very few prostitutes use ganja or bhang. I have never heard of impotency being produced by use of hemp.

56. I am not aware of any admixture with ganja or bhang.

57. I think when ganja is eaten or drunk the effect is the same as of bhang, the only difference being that it is more intoxicating.

In conclusion I have no other information to give. I am of opinion that the habit of using hemp drugs is on the decrease and the means adopted by the Excise Department are sufficient to check its growth. Abolition or undue restriction would be considered a grievance and cause needless sacrifice of revenue by encouraging smuggling, and might lead persons addicted to these drugs to resort to more harmful intoxicating substance.

* Was invited to attend at a meeting of the Commission for oral examination, but failed to appear.

230. *Evidence of BABU GURUDAYAL SINHA,* Kayasth, Honorary Magistrate, Municipal Commissioner and Secretary, Total Abstinence Society, Comilla, Tippera.*

1. I consulted many ganja-smokers and native physicians and have some experience in regard to which my answers are framed.

16. Bhang is prepared generally by the people in their houses. It is prepared from the wild hemp plant. Ganja or charas is not prepared from the wild plant.

19. Charas is not used by the people in this district; ganja is used only for smoking.

21. Flat ganja is preferred for smoking.

23. Bhang is used for smoking by ganja-smokers when ganja is not available or when they cannot afford to pay for it.

24. Lower classes of people drink bhang as medicine for dysentery.

25. The use of ganja is on the increase in this district. There is no restriction for its sale. It is easily available. Within last few years a god by name Tinnath appeared, and it is worshipped by people as the god of ganja. Ganja-smokers generally sit together, sing, and smoke ganja, and thus the number of ganja-smokers is going to be increased, but it is confined to the lower classes of people.

26. It is very difficult to ascertain the proportion of different classes of ganja consumers, but the number of habitual excessive consumers is on the increase.

27. The lower classes of people who are cultivators scarcely get accustomed to it. But those who serve under others and have time to spare, generally join the worshippers of Tinnath, which lead to the practice.

28. (a) Habitual moderate consumers of ganja, three to four pice per diem.

(b) Habitual excessive consumers, five to six pice per diem.

29. Dhatura is not used or mixed with ganja. Bhang massala is not sold here.

30. One-fourth of ganja-smokers practise in solitude and three-fourths in company. It is mainly confined to the male sex. It is not usual for children to consume ganja or bhang.

31. Yes.

32. There is a religious custom known as Tinnath mela in which ganja is essential for the worship of the god Tinnath. It is generally temperate. It leads to the formation of the habit.

33. The public opinion is strongly against it. The use of ganja is generally in disrepute. The word ganjakhori (i.e., ganja eater or smoker) is now a term used by the people towards bad characters. It is now an abusive term. It (ganja) is very injurious to health. It spoils the system and sometimes leads to insanity. There is no custom of worshipping the hemp plant.

34. I don't think it would be a serious privation to ganja-smokers to forego the consumption.

35. It would be feasible to prohibit the use of ganja. The prohibition may be enforced by stopping import. There is no likelihood of the drug being consumed illicitly. The prohibition may occasion discontent among the consumers, but such discontent would not amount to a political danger. The prohibition of ganja may be followed by recourse to bhang, but not to alcoholic stimulants.

40. Bhang is prescribed by native physicians as medicine in cases of dyspepsia, dysentery and diarrhoea, but the lower classes of people only use it.

41. Sanyasis use ganja to alleviate fatigue or to give staying-power under severe exposure.

42. Ganja is not beneficial in any stage of life. Even moderate use of it is not harmless.

43. Ganja-smokers generally remain irritable. They ill-treat their children, wives and neighbours. They commit offences on slight provocation.

44. Ganja produces intoxication even on moderate use. The want of subsequent gratification produces longing or uneasiness.

45. The habitual moderate use of ganja produces noxious effects. It impairs the constitution and causes dysentery. It also impairs the moral sense or induces laziness or habits of immorality, and it produces temporary insanity.

49. The use of ganja tends to produce impotence.

68. Shops are licensed for the sale of ganja and bhang.

69. Whenever a shop is opened in any locality, the wishes of the people are not consulted or considered in any way. Public opinion ought to be considered before a shop is opened in any locality.

231. *Evidence of RAI BAHADUR RAJ KUMAR SARVADHIKARI, Secretary, British Indian Association, Calcutta.*

In reply to your letter No. 24, dated the 10th of August last, I have the honour to submit herewith, by direction of the Managing Committee of the British Indian Association, the views of the Committee on some of the points connected with the consumption of hemp drugs and its effects on which an expression of their views have been invited. Such information and opinion as the Committee are enabled to give have been stated against the several questions contained in the question paper. As none of the Members of the Committee is in a position to give further

information on the subject, the Committee are unable to name a representative who would like to be examined orally by the Commission.

1. The Committee of the Association is composed among others of a large body of landholders who have opportunities of getting information regarding the extent and effect of the use of hemp by people in their estates. As influential members of society they have also every means of knowing the extent of consumption of the drugs among their countrymen and of its results.

* Invited to attend at a meeting of the Commission, but failed to appear.

2. Doctor Prain's definition of the drugs and the names given by him may be accepted as correct. The drugs are known in and about Calcutta as *siddhi* or *bhang*, *charas* and *ganja*.

3. The hemp plant grows abundantly in Rajshahi, Bhagalpur, Mirzapur, Ghazipur and other Districts. Although quite uncared for the plant grows wild in all places in Lower Bengal wherever the seeds have been thrown by those who do not care to eat them with the leaves.

4. In and about Calcutta the plant is known as *siddhi* and the leaves as *shabji* or *bhang*.

5. It easily strikes one that a damp soil is favourable to the growth of the plant. In Lower Bengal in places where the soil is laterite stray plants are not so common as in moist alluvial soils.

6. The plant grows well both densely and scattered.

7. In the District of Rajshahi hemp is cultivated for all the purposes mentioned in this question. Nowhere else in Bengal is it so largely cultivated, but in Bogra and Dinajpur there is a considerable area devoted to the cultivation of hemp.

10. The information of the Committee is that cultivators of hemp do not form a special class.

14. All the products of hemp are prepared in the District of Rajshahi.

15. Sir William O'Shaughnessy's description of the process for making the preparations for smoking, eating and drinking, appears to the Committee to be fairly correct. The quantities used at a time are however much smaller in Bengal than what are mentioned by him.

16. Bhang is usually prepared by the people in their own houses. The leaves of the plant wherever grown can be used for the purpose. Ganja and charas however cannot be prepared from the wild plant wherever grown.

18. All the three drugs deteriorate by keeping for more than about six months. They become mildewed and lose not only their flavour but (as it is said by those who use it) also their active properties. Preservation in well-stoppered bottles and exposing them to the sun for several hours from time to time prevent deterioration.

19. Ganja and charas are used only for smoking.

20. Palki-bearers, diggers of earth, night watchmen, fishermen, ascetics and other people following occupation involving hard manual labour or exposure to inclemencies of the weather are more given to smoking ganja than people in other occupations of life. Some, even of the better classes, sometimes contract the habit of smoking ganja, but their number is less than one in a thousand of low class smokers. Among well-to-do men the habit is less prevalent in Lower Bengal than in Bihar. Charas is rarely smoked by low-class men. It is too expensive for them. Even among the better classes the use of charas, though at one time was more extensive, is diminishing now.

21. The round variety of ganja is the one usually used.

23. The Committee are not aware of bhang being ever used for smoking.

24. Bhang is mostly eaten and drunk by up-

country people. In Lower Bengal the largest proportion of consumers consists of ascetics, up-country traders and merchants and other well-to-do people and also men of the darwan class. Among the people themselves in Lower Bengal the proportion does not exceed one in thousands.

25. The use of charas is certainly on the decrease. It is difficult to say whether the use of ganja and bhang is decreasing. Those who have suffered by the use of spirituous liquors, or are unable to pay for it, find in ganja or bhang a cheap and less harmful substitute.

28. The quantity of bhang used by moderate consumers do not exceed two tolas per day, but the average is usually only half a tola a day or even less. An excessive consumer would eat so much as four tolas a day. A moderate allowance of ganja is a quarter tola a day. The outside limit of hard smokers is, in exceptional cases, two tolas a day.

30. In Lower Bengal ganja and charas are rarely smoked by women or children. Women suffering from chronic bowel complaints have recourse to the use of bhang or opium when other remedies prove ineffectual.

31. The habit of consuming either ganja or charas is not easily formed. The use of either is always repulsive in the beginning, but after the habit has been formed it is difficult to break off, not however so much as to break off a habit of drinking liquors. The habit of eating bhang is comparatively more easily formed, but it is one which can be given up much more easily than either ganja or charas. There is no tendency in the case of any of these drugs for a moderate habit running into excess.

32. The only custom which affects the use of these drugs is the one for the use of bhang on the *Bijaya* day after the Durga Thakur has been immersed in water. The custom, which prevails more especially in Lower Bengal, is quite harmless. It is generally believed to be essential, as it is considered to have the sanction of religion and the drug forms a part of the offering made to the Thakur on the last day of the Puja, but bhang is never used in excess on the occasion and it never leads to the formation of a habit.

33. The habitual use of any of the drugs has been always looked upon with disfavor as is the use of any other narcotic. The consumers are generally regarded as men liable to be easily irritated, and they are therefore not easily offended.

34. It would be a serious privation to several classes of consumers if they were forced to forego the use of the drugs. Persons suffering from chronic bowel complaints or want of appetite, for instance, would be deprived of a valuable remedy if they were prevented from taking their daily allowance of bhang; persons who have to work in the sun, keep up nights, or undergo hard manual labour, would be deprived not only of a valuable aid to their work but what must be regarded a necessity of a life to men of their occupation if they were prevented from smoking their usual dose of ganja.

35. A compulsory prohibition of the use of the drugs would cause great misery to the consumers and make them seriously discontented. The number of consumers is not large enough to justify any apprehension of political danger, but it would be wrong to create such discontents and to deprive a large number of peaceful men and useful

members of society of their short spells of enjoyment amid the labours, cares and anxieties of life. The use of the drugs is so great a necessity to them that it would be practically impossible to prohibit the use. A late member of the Board of Revenue, Mr. Money, rightly observed.—“The fact that 600 men in a village prefer to drink water is no reason for debarring the remaining 200 from obtaining some other drink if they wish it. It would be questionable how far it would be right to set up such tyranny of majority.” If consumption of hemp be prohibited, there would be illicit consumption to a large extent and the very prohibition would perhaps stimulate persons who would have otherwise kept aloof to take to the use of the drugs. Hemp is used by a large number of men who shun alcohol on religious and social grounds, and who perhaps would never use it as a substitute for hemp.

36. Far from alcohol being used as a substitute for hemp, people readily use hemp as a substitute for alcohol. It is cheaper and is believed to be not so injurious to health and ruinous to the individuals. However, it must be admitted that it is difficult to say whether a man who has contracted a habit of taking strong stimulants every day, when forced to give up his usual allowance of bhang or ganja, will not run to the use of alcoholic drinks even at the sacrifice of his religious convictions.

39. Smoking ganja and charas is generally believed to be more injurious than eating and drinking bhang. Smoking has a stronger effect and is more liable to lead to excess than eating bhang.

40. Both bhang and ganja are prescribed, on account of their medicinal qualities. They form ingredients of several well-known and standard medicines in Hindu Pharmacy. Bhang is also used in the treatment of cattle disease.

41. Both bhang and ganja possess valuable properties. Both of them are appetisers. Bhang is beneficial in cases of chronic diarrhoea; both afford refreshment under severe exertion, exposure and fatigue; and all the three drugs are used as valuable aphrodisiacs. The classes of men who usually use ganja and bhang for getting staying-power are mentioned in answer 20. For medi-

cal purposes bhang and ganja are used by men of all classes of the community.

42. The moderate use of ganja and bhang is not only harmless but positively beneficial to the classes of men mentioned in answer 20.

43. Excepting that consumers of bhang and ganja are said to be more irritable and are liable to be more easily offended than others, they are generally speaking inoffensive to their neighbours.

44. The immediate effect of the moderate use of bhang and ganja is that it produces refreshment and exhilaration. To habitual consumers it does not produce intoxication. It does not allay hunger, on the other hand it creates appetite. The effect does not last longer than two or three hours and there are no after-effects.

45. The habitual moderate use of ganja and bhang does not impair the constitution, or injure the digestion, or the chest or the moral sense or the intellect. Ganja has been known to produce insanity, but it is only when taken for some time in excess or by boys or young men not sufficiently strong to withstand its effects.

47. There are no grounds for believing that there is a hereditary longing for the use of any of these drugs.

49. Both bhang and ganja are used as aphrodisiacs. It is so used by men only, although prostitutes have been known to smoke ganja. The use of ganja and bhang as aphrodisiacs is not more injurious than their use as exhilarants.

51. It would be unjust to connect the use of these drugs with crime as cause and effect. It is on the contrary a general belief that those who smoke ganja or use bhang are open-hearted men who enjoy the happiness of others and delight to see others happy.

56. The only substance which is usually mixed with ganja is tobacco for the purpose of improving the flavour.

62. The cultivation of the hemp plant should not be controlled. It would hardly be feasible.

69. The wishes of the people are not consulted before a shop is opened in any locality. But that is unnecessary. The licensee is the best man to judge whether there is a demand for a shop in a certain locality.

232. *Evidence of UMAGATI RAY, Brahmin, Pleader, and Secretary to the Jalpaiguri Branch, Indian Association.*

1. The source of my information is partly based on my experience and partly on the information I have received from time to time from the persons concerned.

2. The definitions of bhang, charas and ganja, as given by Dr. Prain, tend to show that they are obtained from the same plant, which is not the case. In this view of the case, I think the definitions are not clear, and cannot therefore be accepted. The products are locally known as bhang or siddhi, charas, and ganja.

3. Hemp plant, known as bhang, grows spontaneously in almost all the districts of the province, and is abundant in Rangpur.

4. The hemp plant is known as bhang or siddhi and ganja. They do not refer to the same plant.

6. The nature of growth is different in different districts. I have seen its growth ordinarily dense in the Rangpur district.

7. (a) Yes.

Naogaon in the Rajshahi, Baluchara in the Bogra, and Mahadebpur in the Dinajpur districts. The cultivation in Naogaon is extensive.

13. Yes. As far as I know the cultivation is restricted to the places in the districts mentioned in answer to question 7.

14. (a) Yes.

(b) Yes.

(c) Yes.

The same answer as answer to question 7 with respect to ganja.

16. (a) Yes.

(b) Yes.

(c) No.

18. Yes.

19. Ganja is used for smoking and medicinal purposes.

20. Ganja, though used by almost all classes of people, is largely and ordinarily used by the lower labouring class of people and by the sanyasis. Charas is only used by few, as it costs more than ganja.

21. Chur is, no doubt, preferred; but for want of means the flat ganja is ordinarily used.

23. As far as my experience goes, bhang is not used for smoking.

24. The middle and the lower classes of people and a very small number of them drink bhang.

25. On decrease. I think the decrease is chiefly due to the evil effects they produce on the constitution of men, and partly also due to the poverty to which the lower orders of people have been reduced.

29. Milk and sugar or gur are ordinarily mixed with bhang to make the mixture palatable, and a little more stimulant; roots of pumpkin (lau) and seeds of dhatura are sometimes mixed with the said mixture for the purpose of increasing the intoxicating power of bhang.

30. The consumption of bhang and ganja is chiefly confined to the male sex. Children sometimes take bhang for medicinal purposes.

31. Yes.

32. In some localities in which bhang is consumed during some religious festivals, such as Bijaya Dasami and Chayot Sankranti, the consumption was formerly regarded as essential, but it is not so now.

It is always temperate.

No, it is not likely to lead to the formation of the habit.

33. The consumption of each of these drugs is generally regarded as bad. The public opinion is against the use of ganja. The use of the said drug and charas is generally in disrepute as being immoral and ruinous to health as well as to the intellectual faculties. The habitual ganja and charas smokers generally become depraved and indifferent to their health and worldly prospects.

34. I think not; but a sudden privation to habitual consumers may result in bringing about serious diseases on them. The reason is this. None of the drugs is essential to the maintenance of human life, except where used for medicinal purposes.

35. It would be so in the case of ganja and charas, except in cases where the use is prescribed by medical adviser for the treatment of any particular disease. I think there is much probability of the said drugs being consumed illicitly if the consumption is prohibited. The prohibition will, no doubt, occasion a serious discontent among the consumers for some time, but the discontent, I think, would not amount to a political danger. There is every chance of the prohibition being followed by recourse to alcoholic stimulants or other drugs, which are less injurious to the health and life of men.

40. Bhang is prescribed by kavirajes (native physicians) on account of its medicinal qualities. I have seen many persons suffering from dysentery and bowel complaints using bhang under the

directions of the kavirajes. Bhang is also used by the kavirajes in the preparation of medicines for dysentery, grihini (chronic dysentery) and diarrhoea. I had to use such medicines myself for some time for similar affections.

Ganja is also prescribed, though very scarcely, by the native physicians. Bhang is used in the treatment of cattle disease.

41. (a) Bhang.

(b) and (c) Ganja.

About half the hard-labouring and lower class of people use ganja for the purposes indicated in (b) and (c). I refer to moderate habitual use. I know almost all the hard-working coolies of the tea gardens, mutea (porters) class of people, and kustiwalas (native illiterate gymnasts) use ganja for the said purposes. The fishermen also use ganja to give staying-power under severe exposure.

42. The answer of this question depends on the relative state of health of the consumer and the qualities of the drugs. To a perfect healthy man, I consider the moderate use of bhang paste with water harmless, as it is soothing, and has the power of giving tone to the stomach and increasing the power of activity. I have observed this in persons using it.

43. Yes.

44. I cannot say what is the immediate effect of the moderate use of ganja on the habitual consumer, but I am told that it is refreshing. It does not produce intoxication though it makes the consumer a little tipsy at the time. The effects last till the consumer goes to bed and falls asleep. The effect of the moderate use of bhang paste with water is refreshing, and it also creates appetite.

45. (a) The moderate use of ganja produces mental and moral depravity.

(b) Yes.

(c) Yes.

(d) Yes.

(e) It impairs the moral sense in some.

(f) No.

(g) Yes; I have seen many persons who are deficient in self-control, through weakened intellects, fall victims to excessive use of ganja from moderate use and at last die of consumption and dysentery. It may be noted here that I know four or five persons of the middle rank who used to smoke ganja moderately, say once in the evening and once at bed time, died at last of consumption and dysentery.

46. Excessive use of ganja produces physical infirmity, mental and moral depravity. It impairs the digestive functions, and often produces dysentery and consumption or asthma. It also impairs the moral sense and induces laziness, and sometimes habits of immorality. It also deadens the intellect and sometimes produces temporary insanity. The symptoms may be re-induced by use of the drugs after liberation from restraint. I know of a particular case in connection with this subject. Bhang also affects the brain if taken excessively.

49. Bhang and ganja are so used.

Yes, it is used by prostitutes.

Yes, as the consumer is apt to fall victim to excessive use, which in the long run produces the evil effects consequent thereto on the consumers,

and brings about poverty and ruin on him. I have been told by some of the consumers of ganja that ganja has the tendency to produce, and it finally does produce, impotence in the case of excessive use.

52. The excessive use of ganja and bhang has connection with crimes relating to properties, human life, and public peace. The excessive

smoker having exhausted his resources and having yet a strong craving for the use of ganja, has to satisfy the same by means fair or foul, and he has therefore to secure money by theft, and he is likely to commit a breach of the peace and offences relating to human life when under the influence of the drug.

53. Yes. No, I know of no case.

233. *Evidence of* BABU AKSHAY KUMAR MAITRA,* *Secretary, Rajshahi Association, Pleader, Judge's Court, Member, Rajshahi District Board, Commissioner, Rampur Boalia Municipality.*

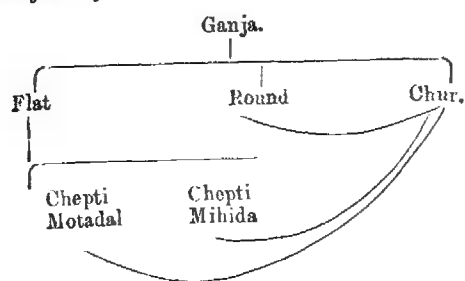
1. As an inhabitant of Bengal and a resident of Rajshahi, I have had some opportunities of observing the consumption and effects of the various hemp drugs used by the people of my own country. As a pleader practising in the District of Rajshahi since August 1885, I have had occasion to attend the Civil and Criminal Courts at Naogaon, the head-quarters of the ganja mahal, which gave me some opportunities of observing the cultivation and manufacture of ganja. As a Secretary to the Rajshahi Association and a Member of the Rajshahi District Board Sub-Committee appointed to consider the questions circulated by the Indian Hemp Drugs Commission, I have had some occasions to make certain enquiries regarding the sale, consumption, and effects of the various hemp drugs in use in this district. My answers are based chiefly upon such enquiries and personal observations.

2. From personal observations and enquiries made by me from time to time, I find that the definitions given in this question may safely be accepted for the province of Bengal. I have found no scientific difference between a bhang and a ganja plant. The only difference consists in the fact that while bhang is produced from male and female wild plants growing spontaneously in almost all parts of Bengal, ganja is produced only from the cultivated female plants, the males having been carefully destroyed at an early stage of their growth.

In the ganja sold all over Bengal, I have always noticed the presence of ripe fruits or seeds, which show that however carefully the males may be destroyed by the cultivators, they cannot entirely put a stop to fertilisation. This may be due to several causes. It may give rise to the natural and *a priori* assumption that all males are not successfully destroyed, or admitting that they are so destroyed, that the abnormal male flowers on female plants cause this fertilisation.

Ganja consists of the dried flowering tops of carefully cultivated female hemp plants (*Cannabis indica*), which have become coated with resin in consequence of having been unable to set seeds freely. This object is secured by retarding the course of free fertilisation by weeding out the males.

Ganja may be classified thus :—



Ganja as well as its cultivation and manufacture does not appear to have been much known to the people of Rajshahi more than three generations ago. I have heard from the present generation of cultivators that its cultivation in Rajshahi dated with their grandfathers. It is said that ganja cultivation was introduced into Rajshahi by some of the ganja vendors of Kushtea. I am a native of the Kushtea sub-division; but I have never heard of any ganja cultivation existing there at any time of its history. During the last century Jessore, or, more properly speaking, parts of parganas Ram Chandrapur and Taragonia, in the celebrated Chakleh Bhusna, produced nearly all the ganja then in use in Bengal. Experts from Jessore do still come to Rajshahi to assist the cultivators in growing and manufacturing ganja.

Ganja is locally known by its well-known name. The broken variety is called chur, the round variety is called gol or Jessoria kolee, and the flat variety is called chepti (motadal or mihidal, according as the twigs are thick or thin). Charas is locally called by that name, and bhang is called bhang as well as siddhi. It is also called bijaya by some higher class sanyasis and physicians.

3. The hemp plant grows spontaneously all over Bengal. I have noticed it in Nadia, Pabna, and parts of Rajshahi; but I have been told that the high dry lands of Barind in the north of Rajshahi do not grow this plant. I have always noticed it as a fact that this plant is seen growing spontaneously in and around the villages and not in the fields outside. This leads me to suppose that their growth, now wild and spontaneous, might have once been induced by the use of imported bhang by the people, who after using the leaves, never cared for the seeds they threw away near about their houses.

4. This hemp plant is called bhang or siddhi, and, as I have already observed, there is found no scientific basis to distinguish it from a plant which produces ganja under careful cultivation and destruction of the male plants. The leaves in the wild plant are, however, slightly longer and broader than in the cultivated ganja: this is about the only noticeable difference.

5. I have had no occasion to make any experiments to ascertain what special conditions of climate, soil, and elevation above sea-level are necessary to the growth of the wild hemp. The wild plants are seen to grow luxuriously in almost all the villages of Bengal, wherever there is a moist soil under a strong sunlight.

6. Its growth is ordinarily dense.

This is, perhaps, due to the fact that after they grow to maturity some quantity is preserved by the people, while the rest are allowed to scatter their seeds about the place of growth and to die a natural death.

* Was invited to attend at a sitting of the Commission for oral examination but failed to appear.

These seeds, once thickly scattered over the soil, give rise to a dense growth of the plant in the next year.

7. There is an extensive cultivation of the female hemp plant for the production of ganja in a special tract of land about 16 square miles in area comprising parts of thanna Naogaon in Rajshahi, of Adamdighi and Nawabgunge in Bogra, and of Mahadebpore in Dinajpur.

So far as I know, there is no cultivation of the plant for the production of charas or bhang in Lower Bengal. Charas is, however, obtained in a very small quantity from the manufacture of ganja in Rajshahi.

The plant, so far as I know, is nowhere cultivated in Bengal for its fibre or seeds. But the seeds obtained from the ganja cultivation are utilised by the people. A variety of hemp, locally called *sone-pât*, is cultivated to some extent for fibre; but this variety is not known to contain *cannabine* or any active narcotic principle.

8. There has been some slight increase in the area under ganja cultivation. But the area under actual cultivation varies from year to year, partly on account of the fact that ganja cannot be successfully grown in the same field year after year, and partly on account of the fact that the cultivators take to the ganja cultivation according to their experience of the next preceding year.

9. While siddhi is obtained indifferently from hemp, whether cultivated or wild, and whether male or female, ganja is obtained solely from the cultivated female plants.

The land on which ganja is grown in Rajshahi is locally called the ganja mahal. The entire tract, so far as I have seen near about its head-quarters at Naogaon, is exposed to the direct rays of the sun, not in anyway shaded by any trees.

The land for this purpose has to be ploughed with more than ordinary care. The ploughing begins in Bysak and goes on all through the rains from time to time, and cowdung, leaf manure and earth taken from the beds of ditches are added from time to time till the field becomes ready for plantation. As soon as the weather clears up in September the seedlings, about half a cubit high, are transplanted at short intervals. When they grow to a certain height, the tops of male plants are broken down by experts, showing what plants have to be destroyed. The females alone are thus left to flower, and these yield the ganja, which consists of the dried flowering tops.

10. The cultivators of ganja do not form a special class. Hindus and Muhammadans of the ordinary cultivating classes cultivate ganja with the assistance of special experts, who again do not belong to any special class.

11. I have no information on this point. The seeds of the ganja sold in the shops germinate freely. Whether the seeds of wild hemp which produces bhang may be utilised for this purpose has yet to be ascertained. The people here do not know that bhang and ganja are the different products of the same plant.

12. No.

13. The cultivation of the hemp plant for ganja is restricted in Bengal to parts of the Rajshahi, Bogra, and Dinajpur districts, the whole tract being locally known as the ganja mahal. I am not in a position to say why these tracts were specially selected. I believe ganja, like the mulberry plants, requires a raised ground with fine

sandy soil, rich with leaf manure and unshaded by trees, and it is perhaps this character of the present tract which first drew the attention of the pioneers of ganja cultivation in Rajshahi.

14. Ganja is prepared in the ganja mahals of Rajshahi at Naogaon, where a small quantity of charas is also obtained by collecting the scrapings from the feet of the labourers who tread down the ganja during its manufacture. I am told that seven to eight thousand maunds of ganja are prepared annually in Rajshahi. Bhang is not prepared in Lower Bengal. It grows wild, and the people collect some leaves, dry them and preserve them for use. Some people, after collecting these green leaves, boil them in milk and then dry and preserve them, which is said to confer greater medicinal properties to the drug.

15. Bhang is generally prepared, or rather collected, by the people from the wild plants. Some people regularly collect these leaves on the last day of the Bengali year, the Choitra Sankranti day, when they are supposed to contain the greatest beneficial properties. It can be prepared from the wild hemp plant wherever grown; but the people generally prefer to use the bhang grown in Bhagalpur, Patna, and Benares. Ganja cannot, in my opinion, be prepared from the wild hemp. In all plants of the Indian hemp the narcotic principle is said to reside in the plants. If the males are carefully destroyed and the females alone are allowed to run to flower, this narcotic substance collects itself in and around the flowering tops which produce ganja. As no steps are taken to arrest free fertilisation in the wild hemp, its narcotic substance does not reside in the flowering tops, but is distributed over the leaves. Hence no ganja can be prepared from the wild hemp.

16. Ganja is seen to be cultivated by all classes of the agricultural people, and bhang is collected and preserved by any one who has any need of it.

17. I don't know anything about charas, but ganja and bhang are said to lose their intoxicating properties by keeping them exposed. Smokers of ganja would not touch ganja over a year old; but old bhang has some demand, and is said to possess more medicinal properties than the fresh leaves. I have no special means of answering the rest of this question; but it seems probable that the action of air, heat and moisture induces a slow chemical change, which in course of time deteriorates ganja till it completely loses its effects as an intoxicating substance.

18. No means to answer.

19. Ganja is used mostly, if not wholly, for smoking. It is sometimes, though on very rare occasions, mixed with the preparation of bhang. For purposes of producing a strong intoxication a very small quantity of ganja is mixed with bhang. This peculiar use of ganja is so rare that it does not call for any special notice and is not confined to any special locality.

Ganja is used as a medicine by some of the village physicians, but in all such cases the drug is used for external application only.

Charas is used wholly for smoking. Any other use of this drug is unknown to this part of the country.

20. Ganja and charas are disreputable drugs, and are seldom used by the higher classes of society. The bearers and boatmen of Behar and North-West Provinces, the chamars, domes, muchis, mehters, dosads, bagdis, sanyasis and

bairagis are the chief votaries of ganja. The consumers of this drug do not form a large proportion of people in Rajshahi. There are four ganja shops in the town of Rampur Boalia, with a population of above 20,000 souls, and the quantity daily sold by all these shops jointly appears, on inquiry, not to exceed two seers or 120 tolas a day. Assuming that each smoker consumes about one-sixth tola a day, which is about the quantity daily purchased by the habitual consumers here, there are, on an average, 720 ganja-smokers in this town or 3·4 per cent. of the population are habitual smokers of ganja.

The habit of smoking ganja prevails more in towns and large centres of trade than in rural villages; and as Rampur Boalia is the only town in Rajshahi with a population above 20,000 souls, the sale returns of the ganja shops there lead me to suppose that, although Rajshahi is noted for the production of ganja, it is not equally noted for its consumption. Charas is not sold here, nor is it commonly used by the ganja-smokers.

21. The round variety is not in use in the Rajshahi district. Of the flat variety the mibidal is much in demand, and the poor consumers prefer the chur to any other variety.

22. Charas is seldom used, and those who occasionally indulge in it use the foreign drug imported from Calcutta.

23. Bhang is sometimes used as a smoke, but such use of this drug is extremely rare, so rare that it is impossible to obtain any reliable information on this head. Such peculiar use of bhang is not, however, confined to any locality or class of consumers. I have heard on enquiry of one instance only where the consumer used it on account of his inability to procure ganja.

24. Although the people of Bengal are not habitual consumers of bhang, yet its use as a drink is not uncommon. It is difficult to say what proportion of the people use it. It is used more by the low-bred people as a drink, and such use is not confined to any particular locality. All that can be said about the use of bhang with any degree of certainty is that it is not usual for the people of Bengal to practise it as a regular habit. It is sometimes eaten; for this purpose the green leaves, or rather the green tops, are fried in ghi and taken as a vegetable, or the dried leaves are boiled in ghi, which is then used in preparing a sweetmeat called majun.

25. The historians of the last century noticed the use of ganja, charas and bhang to prevail to a great extent in almost all the principal towns of Bengal. But the consumption of charas is now almost extinct, that of bhang has greatly disappeared, and that of ganja has been gradually decreasing. The use of ganja, charas and bhang by the higher classes is now seldom noticed. This, I think, may be due to two causes, namely, (1) the alcoholic drink may have greatly displaced ganja; (2) the spread of education has certainly tended very greatly towards this result. The habit of smoking ganja and charas appears, as will be found elsewhere in my answers, to have been introduced into this country by its Muhammadan rulers, and, with the change of Government, it has gradually been decreasing. The example of the habits of life of the ruling race always exerts a great influence over the common people, and the use of alcohol of the outstill of the present age and its gradual spread among all sections of the people may be cited as an example. This ambition to

copy the habits of life in the ruling race once introduced ganja, which is again being slowly displaced by alcohol for the same reason.

26. No satisfactory information is available to answer this question with any degree of definiteness.

27. Ganja-smokers, as already stated, are mainly taken from the lower classes of the people, mostly non-agricultural. Those who have to undergo fatigues and hard labour are induced by others to get into the habit of smoking ganja as a preventive or relaxation; while in the case of confirmed smokers, evil pursuits and evil company greatly contribute towards the formation of this habit. An honest, hard-working cultivator is seldom found addicted to ganja.

28. From enquiries recently made by this Association, I was informed that a habitual smoker of ganja can consume from one to three tolas a day; but this is not only very rarely the case, it is also regarded as extremely excessive even by the most veteran smokers. Habitual moderate consumers generally purchase from two to four pice worth of ganja a day, as the ganja vendors admit. But whether this quantity is consumed by one man alone or by several men in company cannot be ascertained. The probability is that every habitual smoker has one or two associates to oblige with a gratuitous smoke of the drug. The actual consumption by a habitual moderate smoker may be taken at two pice worth of ganja a day. The people of the class to which such habit is found to exist hardly earn more than ten or twelve pice a day.

29. The ingredient ordinarily mixed with ganja and charas is common tobacco. The object of mixing it is perhaps to sweeten the drug and render it less powerful. Bhang is used in several ways—

- (a)—The green tops are fried in ghi and taken with rice as a vegetable. This is, however, extremely rare.
- (b)—The dried leaves are soaked in water, and then made into a paste, which is swallowed as pills with water.
- (c)—The above paste is mixed with sugar and milk, and the solution, being enriched with spices, is drunk cold.
- (d)—The paste being mixed with flour of wheat, a sort of pastry fried in ghi is prepared and eaten as food.
- (e)—The dried leaves are fried in ghi, and the extract thus procured is used in preparing a sweet cake called majun.
- (f)—Dhatara is sometimes mixed in small quantities with the preparation of bhang. Dhatara seeds alone are used for such purposes, and the object of such admixture is to procure increased power of intoxication.

Bhang massala is not sold here in the market, nor is any such substance known to the people. It is sold in the North-Western Provinces, where I have found bhang shops selling not only the dried leaves, but also ready made bhang paste in almost all the principal cities. In the absence of any specific bhang massala, the people of Bengal, when they have occasion to use bhang, mix with it spices, rose powder, and various other cooling substances.

30. The consumption of ganja is generally practised in company. A smoker, instead of finishing one chillum (a pipeful) all by himself, prefers to share it with his associates. He takes a few whiffs first, then passes it on to another to take rest, and then smokes again, and when it is over, enjoys a pipe of tobacco with his associates. Bhang or siddhi is, however, taken in solitude as well as in company. A curious case of ganja smoking in company came to my notice in connection with a criminal prosecution in the Court of the Sub-Divisional Magistrate of Nator some years ago. There is a Kali-bari at Baksor near Nator, where people annually gather in large number for bathing purposes on the *Baruni ganga-snan* day in Choitra. An old, ill-tempered Bengali sanyasi, who called himself Gosain Rup-Giri, used to reside in the Kali-bari as its high priest. In the evening previous to the *Baruni snan day*, he, in company with several others, some of whom belonged to the respectable classes, and two of whom were boys aged from fifteen to eighteen years, was indulging in ganja freely. There was a young prostitute of seventeen or eighteen years of age who was seated in the centre, and the votaries were sitting in a circle round her while smoking on freely. Sometime after the votaries fell fighting with each other with the iron tongs of the sanyasi and with the walking sticks of his visitors; in course of the fight the sanyasi lost two of his foreteeth, got an arm fractured, and received several other injuries. In course of his deposition before the Court, the sanyasi, who was the complainant in the case, called this smoking in a circle a *siddhi chakra*, meaning thereby smoking of ganja and bhang in that peculiar way. The man was an excessive smoker of ganja beyond doubt and was ugly, rough looking, irritative and half crazy, and wicked.

The habit of smoking ganja is not confined to males or to adults alone. Sometimes young boys and low prostitutes are also found addicted to it.

Bhang is used indiscriminately by the males as well as by the females, and its use is not looked upon as a social vice, nor does its use expose the votary to any considerable degree of censure. Unlike ganja, bhang is taken in solitude as well as in company. But bhang does not count so many habitual votaries as does ganja.

The last clause of this question, namely, "Is it usual for children to consume any of these drugs?" seems to me rather misleading. As the question stands it must be answered in the *negative*, but still it is not very *unusual* to find children addicted to, or occasionally indulging in, ganja or bhang.

31. The formation of a habit to consume all intoxicating substances, as a rule, depends more on the nature of the individual votary than on any special attractive inherent quality in the substance. All intoxicating substances are more or less poisonous in their physiological effects, and do produce unpleasant and even distressing feelings to the person who takes any of them for the first time. The first impression produced is, therefore, anything but pleasant or tempting to the novice. Even habitual consumers of intoxicating substances admit that they suffered more than they enjoyed when they first took the substance. I am informed by several smokers of ganja that all of them when they were initiated into the practice, felt a burning sensation down the throat, a giddiness and general feeling of intoxication, which were distressing and terrifying

and in some cases led to complete stupefaction for some time. It is therefore, *prima facie*, the character of the votary rather than that of the drug which leads to the formation of a habit of smoking ganja or charas. The habit, however, can be easily formed by the smokers of tobacco. Unlike the habit of smoking opium, this habit may be broken off easily if the votary is placed under restraint. I have found ganja smokers behaving well without their drug when laid up with severe illness and confined to bed. The late Dr. Chevers observed in his *Manual of Medical Jurisprudence for India*, page 222, that he had never been able to perceive any ill effects from sudden discontinuance of the habit of ganja smoking. But, if left to themselves, the smokers of ganja, after a few years' habit, do not generally succeed in shaking it off easily.

In the case of ganja, smoked in company, there is a decided tendency for the moderate habit to develop into the excessive. In company every one takes a pride in excelling his associates, and the novice is looked upon with contempt. This exerts an influence over the new votary and induces him to run to excess. Ganja smokers supply an example to the saying that there is a competition and pride even in evil-doing.

32. I know of no social or religious custom in regard to the consumption of ganja, and I believe there is none. But there is a prevailing use in some parts of Bengal of bhang on the last day of the Durga Puja, when some Hindus do take a moderate quantity of bhang. This custom is old and has not wholly died out of the country. It has no religious sanction, and it has certainly no binding force on the conscience of any Hindu.

After the immersion of the idols in the evening of the Bijaya day, people go to visit their friends and return many cordial greetings of the day. On such occasions it is customary to entertain the visitors with sweetmeats, sherbet and betel leaves. At some places a little quantity of bhang is also used in preparing the sherbet. But this use of bhang on such occasions is not regarded as *essential* by any one, and bhang is not offered by every house. All that can be said about this custom is that, if bhang is offered on such occasions as a loving cup to any one, he does not consider it unusual. But I know of no custom or rules of society that may be said to require every one to honour the cup at least with a sip. This custom is not, however, in the least degree likely to lead to the formation of any habit.

33. The consumption of ganja and charas is regarded as evil habits, and the consumer is looked upon as a low-bred individual. There has always been a public opinion more or less strong against the use of these two drugs, and the opinion is daily growing stronger than before. This public opinion is social rather than religious. There is no doubt whatever of the existence of this public opinion, which is freely expressed whenever occasions arise.

The disrepute attached to the use of ganja is mainly due to the fact that ganja-smokers are mostly low class men, always ill-tempered, irritative, and often concerned with petty offences of a mean order.

I know of no custom of worshipping the plant, as alluded to in the question. But ganja smokers are seen offering their chillum to Mahadeo before they partake of it. This arises from the popular belief that Mohadeo, the god of power and destruction, counts ganja amongst his favourite drugs.

This has, however, nothing to do with religion, for a Baisnava smoker, who belongs to the opposite sect and owes no allegiance to Mahadeo, is also seen to do the same before he smokes his ganja. Ganja, out of this belief, is sometimes offered at the temples of Mohadeo as a present to the deity.

34. I do not think it would be a serious privation to any class of consumers if they were to forego ganja and charas. The habit of using these two drugs is not so hard to shake off as that of opium. No particular class of society is addicted to these drugs as a class, and most of the habitual consumers are only moderate consumers of the drug. The hardworking bearers and boatmen of Behar and the North-Western Provinces, and very few low class people of Bengal will no doubt regard its disuse as a privation; but whether such disuse would constitute a real or a sentimental privation has yet to be ascertained. The use of ganja is not essential for their existence; it does not supply a physical need, and its disuse is not known to produce any disastrous physical discomfort of a serious nature. These considerations lead me to suppose that even if it be regarded as a privation by some, it would really be a sentiment rather than a fact.

35. The question of feasibility is a large one. It is not impossible, nor will it be deemed unwise to prohibit the use of ganja and charas; but I do not think that a prohibition, however strict, will stop illicit consumption. This, again, is not, however, a consideration which should be looked upon as a serious stumbling block to its prohibition. Illicit consumption may be detected and adequately punished, that is all that can be done, and is even now being done in the case of illicit distillation of liquor. In my humble opinion the real point at issue should be, if I may venture to suggest it, to decide whether the consumption of any and which of these drugs is injurious to public health and morals, and then to find out how to repress with a strong hand the consumption of such drug. The prohibition can be enforced in the same way as the prohibition of unlicensed cultivation or sale of ganja is enforced, namely, by law and by the enforcement of the legal penalty.

Such prohibition will, no doubt, stop a great source of public revenue, but it will not saddle the Government with any additional expenditure to enforce the prohibition. The Excise Detective Establishment, now in force, has not only to keep in check the smuggling in hemp drugs, but it has also to exercise similar functions in respect of opium and distilled liquor of all sorts. The prohibition of ganja will not, therefore, relieve the Government of this Detective Establishment, which, as at present, may be utilised in enforcing the prohibition of ganja without any additional cost to Government. Ganja cannot be successfully grown on any soil, and its cultivation and manufacture, from the very nature of the drug, cannot be secretly carried on. The cultivation, which takes about six months from transplantation to reaping, has to be carried on in open fields; the peculiar odour set forth by the plants when in flower travels far beyond the cultivated area; and the final manufacture has also to be completed in open places. All these considerations tend to shew that its manufacture, once being prohibited, may be very easily detected and adequately punished. The only other question to be considered in this connection is the vexed question of loss of public revenue; that loss may, however, be recovered by slightly increasing the

tax on distilled liquor. I am opposed to any scheme of establishing a Government monopoly in the cultivation and manufacture of ganja. That course will not only be met with great opposition by the tenants and landlords, but will also be attended with great oppression in its operation, inasmuch as it will necessarily take the form of a forced cultivation.

The prohibition of consumption of ganja is not likely to affect the bulk of the people, nor is it such a matter that the disinterested majority will take it as a national grievance and make a common cause with the interested minority. There are questions of sectarian importance, which may be taken up by the opposite sects as a matter involving a principle of Law applicable to all. If a public worship of the Hindus of one sect were sought to be repressed by Law, the Hindus of other and opposing sects, nay, Christians, Muhammadans and other non-Hindus may join their hands to oppose such repression on principle. But I do not see any reason to suppose that the prohibition of consumption of ganja involves such a principle or is such a cause as is likely to arouse the sympathy of disinterested men. Persons interested in the free consumption of ganja are few and far between; and although the prohibition is likely to occasion some discontent among the habitual consumers, it is not likely to take any the least serious attitude. If the evil is there, the only question for consideration should be how to repress it. To think for a moment that such prohibition would create a discontent likely to amount to a *political danger* is, in my humble opinion, entirely groundless and frivolous. So long as there is a tendency in human nature to have recourse to some form of intoxication, there will always be room for supposing that the prohibition of one form will only serve to introduce another form of intoxication; and in the present case the prohibition of ganja is likely to be followed by the introduction of dhatura to some extent and by increased consumption of alcoholic stimulants to a large extent.

36. That alcohol has now-a-days displaced ganja and charas to some extent and bhang to a large extent, is mainly due to the change of habits of life of the people with the change of times. Even an illiterate man of these days tries and aspires to copy his superiors, and the example of the higher class is thus gradually penetrating the lower strata of society.

Ganja is a disreputable drug; its use in this country has always been associated with crimes and misdemeanors; indulgence in this drug is generally regarded as a low habit. Against all these stands its extreme cheapness as the only recommendation of ganja to the poor people. It is poverty which binds them down to ganja, and the moment a man of dissipated habit earns enough to pay for an alcoholic drink, he eagerly begins to copy his superiors. This natural tendency finds a ready satisfaction if the votary gets richer than before or if the price of alcoholic drink is brought down within his means. The cheap liquor of the outstill having supplied one of these conditions, ganja begins to decline in a perceptible degree. It was not uncommon to find the use of ganja still lingering among some of the middle classes so long as the price of alcoholic drinks was high, but with the introduction of cheap liquor, ganja has wholly been discarded by the middle class. During the Muharram and Holi festivals, a few years ago, ganja smoking used to be noticed to a large extent, but we find on such occasions now

more signs of drunkenness with alcohol than with ganja or bhang.

Chapter VI. Note.—Most of the answers to the questions in this chapter refer to matters of hearsay. It is very difficult to obtain accurate information on these points. I shall refer to authorities consulted and cases observed by me as well as by many other persons whom I had the benefit of consulting.

37. While ganja contains the active narcotic principle diffused over the flowering top which is smoked mixed with dry tobacco leaves, charas contains and consists in the narcotic principle itself in the form of a resinous extract. Ordinarily therefore one should expect to find more poisons and intoxicating effect in charas than in ganja, but all smokers (including some gentlemen who tried both the drugs as an experiment) allege that while the effect produced by ganja smoking is instantaneous and lasting, that of charas is not so. Although both produce the same kind of intoxication, there is yet a difference in degree: the effect of charas is not so strong as that of ganja. Charas is however seldom used by itself; its consumers use it only to whip up the effect of ganja.

38. None that I have ever heard of.

39. Smoking a hemp drug is by far the less injurious form of its consumption than drinking or eating the same. In smoking, the volatile fumes alone are inhaled temporarily and exhaled out of the body; but in eating or drinking the same drug, its substance is made to reside longer in the body where it is more or less assimilated by the votary which cannot but produce worse results.

40. The name of ganja does not appear in the oldest records of ancient Hindu Literature. It has of late been attempted by some writers to trace its name and accordingly its use as far back as the age when the Atharva-vedas were compiled. Mr. H. C. Kerr evidently holds that opinion. Another writer, Babu Binoy Krishna Dutt, in his small treatise called the Guide to Health (Calcutta, 1848) traces it as far back as the age of Manu and refers to the fifth chapter of the Institutes of Manu in support of his view. He does not quote the passage, but evidently relies upon the fifth verse of the fifth chapter. The passage in question in Manu reads thus:—

“Lasunam Grinjananchaiba Palāndum Kabākānicha Avakshyāni Dwijātināmamedhya Prabhānicha.”—Manu, chapter V, verse 5.

The word grinjan has evidently been taken by the learned author to refer to ganja. Medhatithi, the oldest commentator of Manu, dismisses the first three words by a short note saying that they are well known by their respective names. Kulluk Bhatta, another celebrated commentator of Manu and a native of the Rajshahi District, flourished during the Muhammadan rule when ganja was in common use. He defines lashun, grinjan and palandu in his commentary to mean vegetable bulbs of the same genus, and all the lexicographers of ancient India define grinjan to be a vegetable bulb having a smell approaching to that of garlic. Grinjan is the common wild carrot growing in abundance in India from its remotest antiquity. The name ganja does not occur in Susruta or any of the ancient compilations of Hindu medicine. The earliest notice of the name ganja may be found in Bhābprakash, a Sanskrit compilation of Hindu medical literature.

The author of this compilation lived during the Muhammadan rule and enriched the Hindu *Materia medica* with the descriptions of many foreign drugs, plants and fruits brought in by the Muhammadans. In this compilation is noticed the name and properties of ganja thus:—

“Bhangā Ganjā Mātulāni Mādini Bijayā Jayā, Bhangā kafahari tiktā grāhīni pāchanī laghus; Tikshuosnā pittalā mohamaudabāgbanibardhini.”

Bhanga, ganja, matulani, mādini, bijaya and jaya are the various names of the same drug bhang, which “destroys cold, contains bitter taste, digestive and is easily digested, produces a quick effect, increases temperature, induces forgetfulness and abusive language, and generates heat in the body.” Here ganja evidently refers to that form which is eaten.

The name and use of bhang appear to have been known to the people of India from its remotest antiquity and the word bijaya which occurs commonly in all books of ancient Hindu medicine may be quoted in evidence. But besides this it does not appear anywhere that the name, use and cultivation of ganja were known before the advent of the Muhammadans. The word bhang as known to the ancient Hindus signified two things, either to the fibre-producing hemp known as *shone* or to bijaya or bhang. Bijaya or bhang forms the ingredient of many a Hindu medicine, and we have other evidence of its consumption as a drink. But the custom of smoking the hemp drug does not appear to have been adopted by the people till after the Muhammadan conquest. These facts lead me to suppose that as tobacco smoking was introduced into India by its Muhammadan rulers, the habit of smoking ganja and charas was also similarly imported into India. Bhang appears to have been largely used by the people for intoxication and by the physicians as a medicine, but no such corresponding use of ganja can be traced in any of the ancient authorities.

41. This question requires a special knowledge of medicine and physiology which I do not possess. I shall therefore proceed to answer it from a lay-man's point of view.

(a) The various hemp drugs now in use in this country are regarded by competent authorities as cerebral poisons, and as such their primary action is on the nervous system. I do not understand how a cerebral poison or, more properly speaking, a poisonous fume may be regarded as a food accessory or digestive. The prolonged use of any of these drugs impairs digestion, and all confirmed ganja-smokers are found to eat very little. The first impulse of a novice taking any of these drugs is said to induce him to take more food than he ordinarily does, but there is no record to show that he digests it with equal success. The use of any of these drugs produces costiveness beyond doubt.

(b) Whether the moderate use of ganja, charas or bhang may be beneficial in its effects to give staying-power under severe exertion or exposure, or to alleviate fatigue has yet to be ascertained by careful experiments. Those who use any of these drugs justify their habit on these grounds and allege that ganja is not only an article of solace and of great luxury to them, but is also an article of great necessity. However loud the votaries may be in praise of their favourite drugs, I am inclined to think that the beneficial effects of ganja, charas or bhang are more imaginary than real.

Our body is composed of organs, destined to accomplish the various acts of life, which are scientifically called functions. The functions may properly be divided into two classes :—

- (1) the functions of nutrition which provide for the preservation and increase of our body ; and
- (2) the functions of relation by which we are placed in relation with the external world, thence receive our various sensations and execute all our movements. To the second are assigned the apparatus of locomotion and the apparatus of sensation. The faculty of locomotion depends on a general property of all animals, called contractility. In man, this faculty resides in his muscles, the whole of which taken together constitute his flesh. Our nervous system presides over voluntary acts and sensations, which can never be had without the will of man. Some actions, like those of the beatings of the heart, are no doubt independent of our will, but all actions of locomotion are directly governed by the will and regulated by the nervous system.

Now, ganja, charas and bhang being cerebral poisons directly affect this nervous system and thereby induce involuntary actions of motion, such as dancing, laughing, and involuntary sensations such as hallucinations. Their direct and primary action upon our system being thus subversive of our natural control over our movements and sensations, they can hardly be said to give us any staying-power under severe exertion. They may, for the time being, produce an abnormal activity of the nervous system, and thereby quicken our actions of locomotion, but such abnormal activity, inducing only involuntary movements, is sure to be punished by nature with abnormal relaxation. This result, in the nature of things, is directly proportional to the power of the drug: the more quick the abnormal activity, the more quick is the relaxation produced. I do not therefore see how a cerebral poison can produce any beneficial effects upon the system of man so as to give him any real staying-power.

- (c) Sanyasis and mendicants of all denominations claim for ganja the peculiar virtue of preventing disease in malarious and unhealthy tracts, but I do not know how far this virtue actually resides in the drug. I have observed during my sojourn to the North-Western Provinces, Oudh and Rohilkhand that the people there daily take a small quantity of bhang as a cooling draught, and allege that such moderate daily consumption wards off an attack of diarrhoea which is induced by the excessive heat of summer.
- (d) Some quacks allege that ganja, if moderately smoked during an attack of acute pains due to hydrocele, effects a speedy cure. I am told on the authority of a gentleman who subjected him to this treatment that he found it very successful.

Most of the sanyasis use ganja both as a preventive of disease and as a means of concentrating

thought. Most of the palanquin-bearers, boatmen, mehtars, domes, chamars, dosads, bagdis, and other lower people use it in the belief that it gives them staying power under severe exertion. In this I refer to habitual moderate use. But I am told on the authority of military surgeons, of whom I had the opportunity of consulting Dr. Rogers, Civil Surgeon of Rajshahi, that the soldiers addicted to ganja behave very miserably during a march and very soon grow fatigued and are left behind by those who use no such drugs.

42. I do not consider the use of any form of the hemp drug as beneficial in its effects. The same reasons which lead me to that conclusion justify me to say that even the moderate habitual use of the drug cannot be regarded as entirely harmless. As these poisons act directly on the brain, their frequent use, even in a moderate quantity, cannot but produce some injury to the consumer in the long run. The habit of using the Indian hemp drugs as a stimulant and narcotic is regarded by medical authorities as dangerous. Even in the case of a moderate consumer, the habit once formed becomes part of his life, and even a few whiffs every day throughout life cannot be considered harmless. The use of intoxicating substances which partly enter into acts of nutrition may, if it is moderate, produce no bad results very soon ; but a cerebral poison, like the Indian hemp, adds nothing to our nutrition, its sole effect is temporary excitement which cannot but produce, in course of time, a lasting evil.

43. The questions nowhere give a definition of a moderate consumer, so it is very difficult to say whether moderate consumers are inoffensive to their neighbours or not. A consumer of ganja is generally found to be peevish, and is easily irritated. While under the influence of his favourite drug, he also does not know what acts he may commit the next moment. With such experience of the habits of life of a neighbour, he is regarded as an offensive being. Ganja-smokers have been known to have committed the gravest of offences against their neighbours without the slightest provocation.

44. The immediate effect of the moderate use of ganja by the habitual consumer does not generally appear till after the lapse of 4 or 5 minutes, and then it is found that the temperature of his body has risen, his eyes have become red, and his spirit roused. The habitual consumer calls it refreshing and slightly intoxicating.

The chief use of the Indian hemp is as a substance that will produce intoxication. The poor people, unable to indulge in costly modes of getting intoxicated, naturally get into the habit of using the Indian hemp drugs which are perhaps the cheapest articles of intoxication. Although some people are eager to justify the use of the Indian hemp drugs on the ground of its being a food accessory and consider its use by honest peaceable labourers as a physical benefit, my general experience does not justify me in accepting the same as true. Habitual use of ganja does not allay hunger as a cup of tea or any other similar food does. It does not add to the nutrition of the body. Its constant use impairs appetite. The effect of a few whiffs by a habitual smoker may last only for a few minutes, but a continuous smoking for minutes produces an intoxication that may last from 4 to 5 hours. Its after-effects are weakening of the whole system which becomes unfit for further work without the use of the drug again. Mendicants addicted to ganja to excess

are however sometimes found to be quite healthy and well nourished in body. But their other habits of life, their constant roving about in free atmosphere out of doors may be said to help them very greatly in getting rid of the evil effects of ganja. I have seen a mendicant who sits naked day and night on a pile of wood floating in the Hughli near Azimganj, without anything to cover his head or take shelter from the rain, storm or heat of the sun. He is occupied in smoking ganja all day and night, and, though old, seems to keep a good health. But such peculiar votaries have never been placed under regular observation to justify us in holding that ganja produces beneficial effects in its votaries.

45. Even a moderate use of any of these drugs, if practised as a daily habit, produces physical, mental and moral degradation in course of time. The normal physical condition of some votary may be strong enough to withstand constant poisoning with these drugs for some time, but in the long run every constitution is sure to break down under the influence of the drug. The use of these narcotic drugs impairs the constitution, injures digestion, causes dysentery and bronchitis after some years. Their habitual use induces laziness and low habits, and by impairing the intellect and the moral sense degrades the votary. The intellect is more or less affected from the beginning of the habit, and as the poisoning goes on from day to day the votary gradually begins to live more and more in the land of hallucinations, till the intellect loses its elasticity and produces insanity. The physical effects of habitual use of ganja come very soon to be observed by the neighbours. A beginner in a family, however carefully he may try to conceal his newly-formed habits, is sure to be found out by his family members. The mental derangement produced by the constant use of ganja takes some time to appear as a permanent trait, but a long continued habit of this nature generally ends in insanity and very often in dysentery, bronchitis, and sometimes in complete loss of voice.

The history of a ganja-smoker, collected and kindly placed in my hands by Dr. Rogers, Civil Surgeon of Rajshahi, is quoted *verbatim* to show how far the mental derangements, once produced by ganja, last even when the votary has been placed under restraint and how far the habit induces tendencies of a criminal nature.

"Facts concerning prisoner Hanif Shah, lunatic, while under observation in the (Rajshahi Central) Jail—

"Struck an overseer with a brass cup on 15th March 1893.

"Attempted to strike an overseer with an axe on 14th July 1893.

"Talks at random and is very excitable and dangerous.

"Convicted on 30th June 1892 of having struck with a knife a ganja vendor, who refused to give him ganja on credit, and caused the vendor's death. Sentenced to five years' rigorous imprisonment.

"A confirmed ganja-smoker outside, probably got ganja inside, as only lately a prisoner was found with a quantity of ganja in his possession in the Jail.

"This is a case in confirmation of the generally accepted opinion that ganja-smokers are liable to

fits of uncontrollable passion, which render them most dangerous.

"The lunatic in question has been transferred to Berhampur."

I do not know anything definitely about the effects of charas.

Bhang physically induces laziness and produces an intoxication that may last for a period above 24 hours; it makes the intellect dull and stupid, and thereby induces intellectual degradation; morally, this drug is believed to excite immoral tendencies in its votary.

46. The same results as above are produced by habitual excessive use of these drugs, the only difference being that the duration of time within which the evil effects begin to appear in moderate use is longer than that within which the evil effects appear in excessive use.

47 and 48. Habitual moderate use of any of these drugs has never been known to be a hereditary habit or to affect in any way the children of the consumer. But the example of the father is likely to be followed by his children and, as a matter of fact, is followed by the children of some consumers.

49 and 50. I have no means of obtaining any information on this point, and people likely to supply such information are very unwilling to answer any interrogatories on this head. But I am told by some of the kavirajes that all medicines prescribed by them as aphrodisiac contain more or less a quantity of bhang.

51 and 52. Yes, a large proportion of bad characters are on enquiry found to be habitual consumers of ganja. Such habit has, however, no direct connection with any special class of crimes. Smokers of ganja like opium-eaters are generally found concerned with petty thefts.

53. Excessive indulgence in ganja has been known in the past as well as in the present times to incite to unpremeditated crimes of a violent nature. I know of no cases (except the one already quoted) in which it led to temporary homicidal frenzy.

54. Dacoits are said to use ganja to fortify themselves to commit premeditated crimes. Many lathials do the same before engaging in a riot.

55. Criminals, in order to further their designs, are sometimes said to induce their victims to partake of ganja. It can produce complete stupefaction without admixture if the victim happens to be unused to the drug. But such cases are few and far between, and I have not succeeded in collecting any definite information.

56. Ganja is mixed with dried tobacco leaves, to which is added a little lime, and in some cases a few drops of rose-water are also added to sweeten the drug and produce a cooling smoke. Those who use it in excess seldom mix anything with it to lessen the effect; they are, on the contrary, sometimes found to add dhatura seeds to increase the power of intoxication. The sanyasis and other excessive smokers of ganja generally make use of dhatura seeds for personal consumption. Moderate consumers of bhang are sometimes found to mix ganja or dhatura with bhang to increase the power of intoxication. I know nothing definite about charas.

57. I have had no occasion to make observations necessary to answer this question.

234. *Evidence of MR. A. F. M. ABDUR RAHMAN, Honorary Secretary, Muhammadon Literary Society, Calcutta.*

32. Among Muhammadans there are no customs, social or religious, in regard to the consumption of these drugs.

33. The consumption of these drugs is not regarded with much disfavour, although its excessive use is considered injurious.

35. It would not be feasible to prohibit the use of any or all of these drugs. The prohibition is likely to cause discontent among the consumers, but having regard to their limited number, there is no likelihood of a political danger. There is every chance of the prohibition being followed by recourse to alcoholic stimulants.

41. For medicinal purposes bhang, ganja and charas possess wholesome properties. The classes of people, who are engaged in hard manual labour or have to expose themselves at night by reason of their occupations, are generally given to smoking ganja. Charas is considerably used in yunani or bakimi medicines for aphrodisiacs. A moderate use of ganja or bhang is considered beneficial by the consumers.

43. Yes; generally they are.

45. No.

67. No.

Oral evidence.

Question 1.—I am about 36 years of age, a Barrister-at-Law and Advocate of the High Court,

Calcutta, Honorary Presidency Magistrate, Municipal Commissioner, Fellow of the University of Calcutta, and Honorary Secretary to the Muhammadan Literary Society. The Society at a meeting has formally deputed me to represent its views. My answers were written under the Society's instructions. No Special Committee was appointed to deal with this subject. The Committee of Management formulated the views which I have stated. This matter, in accordance with custom, was not placed before the Society generally, which consists of about 500 members. There are about 30 members on the Committee of Management. I was instructed only to answer the questions which I have answered. The Committee has deliberately refrained from giving any views on the question of administration.

Question 45.—The negative answer to Question 45 only refers to the 1st paragraph of the question.

Question 46.—The Committee deliberately refrained from expressing any opinion on this question. The Association had no particular experience on some of the matters contained in the questions which have not been answered, so they did not answer them; but they had some experience about moderate use, and therefore answered the first portion of Question 45.

235. *Evidence of BABU KAMALA KANTA SEN, Kayasth, Zamindar and Pleader, President of the Chittagong Association.*

1. I am a vakil practising here and also a zamindar having opportunities of hearing from my clients and tenants.

2. These definitions may be accepted; they are known here by the same name.

3. In the hill tracts and some places in Rangamati of this district, the hemp plant grows spontaneously without any care or looking after.

4. Hemp plants include ganja and bhang. They are different plants.

6. Scattered.

7. No.

14. No.

15. Wild bhang trees are dried and kept for eating and drinking purposes.

16. Yes, they prepare in their houses. Yes, it can be prepared from the hemp plant. Ganja and charas can be prepared, but not prepared here.

17. Toomeahs of the hill tracts.

18. Yes, they deteriorate by keeping. Yes, lose their effects after one year. They are worm-eaten, and by exposure lose their alcoholic strength. If they are kept wrapped securely without exposure to air, they may not deteriorate about a year or so.

19. Ganja is used for smoking only; charas is not used in this district.

20. Ganja is smoked by Domo (fisherman), Hari (sweeper), and Hindu and Muhammadan fakirs (ascetics).

21. Flat is preferred.

23. No.

24. Orthodox Hindus drink bhang on the Dasami, Sripanchami and Sivaratri days. Hindus and Marwaries drink habitually. Bhang is eaten only as medicine in pills.

25. Rather on the decrease. Owing to dearth of the drugs (probably).

27. Fishermen to protect themselves from exposure from cold, and sweepers to protect themselves from bad smells, etc., and ascetics to concentrate their attention to devotion, etc.

29. Milk, pepper and sugar are mixed generally in making bhang. Dhatura is not used. Mixtures are made to make them delicious and to increase their intoxicating power.

30. Ascetics consume in solitude. Bhang is used in solitude; ganja is used in company. It is mainly confined to the male sex. It is not usual for children to consume any of these drugs. Adults and old people use the drugs.

31. Not easy, but it is difficult to break off when formed. Yes, there is a tendency to develop into the excessive.

32. Bhang is drunk on the occasion of Dasami, Sripanchami and Sivaratri days for religious purposes. It is regarded as essential by orthodox Hindus. It is generally temperate. It is not likely to form into a habit or prove injurious.

33. They are generally in disrepute because of their irritable temper owing to such consumption.

No such custom of worshipping the hemp plant.

34. Yes, by fishermen and sweeper classes.

They would be unable to carry on their profession or work efficiently.

35. If prohibited, they are likely to be used illicitly. Prohibition could be enforced by increasing the price or by punishing them criminally. Yes, prohibition would cause serious discontent among the consumers. No political danger is expected; might or might not be.

36. No.

40. Yes.

41. (a) Bhang is beneficial for digestion. (Hindustanis consume for that purpose.)

(b) Bhang and ganja alleviate fatigue and give staying power under severe exertion or exposure.

(c) Yes; (Domes and Haris).

42. Moderate use of bhang is beneficial to elderly people.

43. Yes.

44. No particular effect on habitual consumers. Yes, it is refreshing. Yes, it produces some intoxication. It allays hunger to some extent. Yes, it creates appetite. The effect of bhang lasts about 24 hours, of ganja about 3 or 4 hours; after-effects, weariness. Yes, subsequent non-gratification produces longing and uneasiness.

45. (a) Bhang does not produce special noxious effects, but ganja does.

(b) Bhang does not, but the ganja does.

(c) No.

(d) Bhang does not, but the ganja does.

(e) It may or may not.

(f) Excessive use may lead to insanity, temporary as well as permanent. Yes, may be re-induced. Their eyes get red and contracted.

46. Excessive use of bhang as well as ganja is equally injurious as stated above.

47. Most probably not.

48. Most probably does.

51. Not so.

52. Excessive consumers of these drugs are generally of bad characters.

53. Yes. Yes, I know several cases.

54. Yes, sometimes.

55. No such cases occur in this part of country.

56. Some rich people boil ganja in milk and use the cream. Its effects are moderate. Bhang is mixed with milk and sugar and generally with pepper which does not modify its effects.

Dhatura is not used.

63. No, nothing to suggest.

64. No objection.

65. I think the present taxation is reasonable.

66. There should be different rates. Flat should be taxed less for its woody branches which are thrown away.

67. No objection.

68. Houses or shops are not licensed. Licenses are taken out for selling in certain localities where houses or shops are erected at the pleasure of the licensee.

69. I do not think they are consulted at all. Local public opinion should be considered.

236. Evidence of BABU PURNA CHUNDER MAITRA, Secretary, Band of Hope, Faridpur.

In consideration of the fact that it has been unreservedly condemned by eminent doctors as one of the most dangerous poisons known, as the most potent cause of lunacy, and as the most pernicious and deleterious of all excitants ever in use in any country, this Society is humbly of opinion that an entire prohibition of the preparation and sale under Government patronage, and total prohibition of ganja cultivation except for medicinal purposes will prove beneficial to the country, of course, under strict vigilance on the part of the local authorities as a safeguard against private cultivation.

The principal arguments advanced against abolition of Government monopoly by the supporters of the ganja traffic are: (1) it will affect revenue which will have to be met by a fresh taxation; (2) it may create a spirit of disaffection among the jogis, sanyasis, fakirs, and mendicants whose number is not small; (3) ganja has the property of destroying malarial poisons and of neutralizing the effects of impure water; (4) it is a question whether the use of ganja is really doing more harm compared to other intoxicants; (5) abolition of Government monopoly will increase ganja consumption.

The total abolition of the monopoly of the ganja traffic will indeed entail a loss of revenue, an amount compared to the total revenue "is not," as Sir Charles Elliott said in his recent speech at Naogaon, "so great that its loss would plunge the country into financial difficulties." So

there need not be any apprehension of a fresh taxation to recoup the loss.

There are in truth a number of jogis, sanyasis, fakirs, and mendicants addicted to ganja smoking, but ganja smoking forms no part of their religion, and there is not a single Hindu or Muhammadan religious book which sanctions the use of ganja. On the contrary, the Hindu Shastras and the Muhammadan Koran, like the Christian Bible, emphatically enjoin "touch not, smell not, taste not that which intoxicates and stupefies the brain."

No real disaffection can, under the benign rule of the British Government, be seriously apprehended; and even in the event of there being any such apprehension, the fact should not be lost sight of that the Government in this case will have the support of the bulk of the population, against which the clamours of a discontented few will prove to be utterly unavailing.

Ganja may or may not be a preventive for malarial fever. It will be for the medical authorities to pronounce whether it is; the Sanitary Commissioner in his annual report does not suggest. But it seems somewhat strange that the habitual use of the pernicious drug that stupefies and often deranges the brain and to an appreciable extent brutalizes the soul can be justified by its advocates as a preventive for malarial fever and a purifier of impure water.

The question whether the use of ganja is really doing more harm compared to other intoxicants

seems to be simply ridiculous in view of the opinions of medical experts, of the amount of crimes committed under its influence, and in view of the fact which experience tells us that ganja has a "special effect on some of the various animal passions, such as courage, anger, revenge and lust, and in renewing those lost or exciting those exhausted or depressed." Statement VII, of the reports of the lunatic asylums in Bengal for the years 1889, 1890, 1891, and 1892, shew that of the total admissions, 26.72 per cent. in 1889, 25.33 per cent. in 1890, 24.88 per cent. in 1891, and 23.49 per cent. in 1892, are attributed to Indian hemp. So in the opinion of Surgeon-Colonel J. G. Pilcher, F.R.C.S., Officiating Inspector-General of Civil Hospitals in Bengal "the use of ganja or other preparation of Indian hemp is by far the most fruitful cause of admissions throughout India. The next potent cause is spirit drinking, . . . while the use of opium seems to give rise to comparatively little insanity in the community . . ." (paragraph 19, Lunatic Asylums' Report, 1889),—vide also paragraph 14, paragraph 15, paragraph 12 of the Lunatic Asylums' Report for 1890, 1891, 1892, respectively. Mr. C. J. O'Donnell, Superintendent of Census Operations in Bengal, 1891, thus observes in respect of the use of ganja in his census report, Volume III, page 240: "Although it is possible that there may be a racial strain towards insanity in Northern and Eastern Bengal, it is very probable that the greater preference evinced by the people for toxic drugs, such as ganja or Indian hemp, must be taken into account. The intoxicants in use in Behar and Chota Nagpore, a dilute form of spirit obtained from the flower of the mohua tree, the fermented juice of the Palmyra palm and rice beer are all comparatively weak liquors and never known to induce mental disorder. Ganja, on the other hand, is unquestionably very deleterious, being recognized throughout Bengal as a brain excitant of a very dangerous kind." Benjamin Ward Richardson, M.A., F.R.S., thus observes: "We have, however, sufficient evidence of *bad* effect to be certain that the peculiar intoxication induced by the narcotic (hemp drug) is certainly destructive to sound mental life. . . ." (Abkari, January 1892, page 10). Brigade-Surgeon R. Pringle, M.D., in his note on ganja says: "the action of ganja on the system, when taken alone and without any controlling power, is very remarkable, and but little known on account of its rare occurrence, and appears to resemble that of no other drug in the absence of all narcotism, but yet combined with strange temporary loss of will power and that of memory, with *inability to concentrate thought*."

Statement VII of the Lunatic Asylums' Report shows also the amount of crimes committed under ganja influence. A full and complete return on that head is not available. In Rajshahi (specially in Puthia and Nator) and Hughli districts most of the pilferings are imputed to the ganja and opium smokers. At the Faridpur Sessions during the current year two cases* of brutal murder (one of murdering a wife and child and the other of murdering a lame boy) have been tried, and the criminals declared to be iusane, the cause of insanity being attributed to ganja smoking. All these and the criminal propensities of the ganja smokers lead to the irresistible conclusion that ganja is a real evil, not to speak of an annual drain of about 22 lakhs of rupees on the poverty-stricken and half-famished people of Bengal.

Then it is said that the abolition of Government monopoly will increase ganja consumption. If

free cultivation is allowed, it will no doubt have that effect, but that is not what is wanted. The thing that is wanted is a prohibition of ganja cultivation altogether, except on a small scale for medical purposes, if necessary, and even that under the direct control and supervision of Government. The abolition of out-stills has caused a decrease in the consumption of country liquors; so entire prohibition of ganja cultivation will put a stop to ganja smoking. The greater the difficulty of attainment, the lesser the consumption. Ganja is not a food, much less a food of a "highly concentrated nature." So, if it is not available in the market, very few will care to cultivate it, specially when there would be apprehension of a criminal prosecution in case of detection, which, under the cautious vigilance of district authorities, will never be a difficult task. That habitual and hard ganja smokers can do without it admits of no doubt, but they will not give up the habit except under compulsion or sanction of the law. Ganja-smoking prisoners are forced to give it up as soon as they are incarcerated, and instances are not rare that inveterate ganja smokers come out corrected from jail, never indulging thereafter in the pernicious habit.

It is very difficult to suggest a probable substitute for ganja. Liquor may be one, and a peculiar preparation of strong tobacco may also serve the purpose. But in all cases it will depend on a man's individual evil propensities and craving for intoxicants to take or not to take a substitute.

In conclusion, this Society begs leave to urge upon the Commission to consider the justice and propriety of a just, benign and Christian Government to allow cultivation and sale of a drug which has been excluded from some countries, and in England doubly protected in the poison list.

Oral evidence.

The Band of Hope, Faridpur, is a Temperance Society. It numbers 474 members, the majority of whom belong to Faridpur. Quarterly and special meetings are held at Faridpur. A meeting was held in connection with the present subject, at which my letter, which had been previously drafted, was approved. I had been appointed to draw up the letter by the Executive Committee. The letter was approved by a general meeting. The Faridpur Band of Hope is affiliated with the Anglo-Indian Temperance Association of London.

The authorities upon which the Association relies in framing the opinion stated in my letter are almost all quoted in the letter itself. After the Association approved my letter, there was no further consultation on the subject. I am not aware therefore of any other grounds, beyond those stated in the letter, for the opinion held by the Association.

As regards the two cases quoted in paragraph 7, in which brutal murder is alleged to have been attributed to ganja-smoking, which brought on insanity in the criminals, there was evidence in the records of the cases that ganja had caused the insanity. In saying this I act upon information. I have no personal knowledge. I told the Association about these cases. When I submitted my draft I explained these cases. So far as I recollect, the Sessions clerk, who is a member of the Band of Hope, was my informant. I had heard rumours of these cases, and that led me to enquire about them. I do not know whether the Sessions clerk was aware, at the time I made enquiries of him, that his information was to be used

* See note appended to witness's evidence.

in the Association's letter. I could not have taken any further steps to ascertain the facts of the cases. I did not attempt to see the records, because I believed it would be useless for an outsider to apply. I wanted simply to give the Commission a clue that they might find out the truth. I did not, however, recommend that the Commission should send for the records. I simply stated the cases as facts. When I found that the Commission was going to hear evidence, and not merely act upon the written statements, I attached less weight to written statements. I have, however, no accurate information now to give about these two cases.

Note by the Commission appended to the evidence of BABU PURNA CHUNDER MAITRA.

(1) *Madhab Nagarchi.* Madhab Nagarchi was tried by the Sessions Judge, Faridpur, for murdering his wife and child and was acquitted on the ground of insanity on 10th July 1893.

The only mention of ganja in the record is in the evidence of Mohan Nagarchi, uncle of the accused, who stated that "Madhab smokes ganja." This was before the Committing Magistrate. It was not repeated in his evidence before the Sessions Judge. This Mohan Nagarchi was alleged by the accused to have had an intrigue with the

murdered woman, on account of which the accused took her life.

Mohan Nagarchi and two other witnesses stated that the accused had been mad several years before and had then injured his mother; and six witnesses (including the above) stated that he had been mad for a day or two before the murder. He had also had a quarrel with his wife the day before. The Committing Magistrate attributed the crime to jealousy; but the Judge, to insanity. Neither mentions ganja. The Asylum papers show that "the lunatic's father had tendency to insanity; and that the probable cause of Madhab's own insanity was "natural tendency possibly made worse by smoking ganja."

(2) *Dhopai Khan.* Dhopai Khan, apparently without motive, murdered a cripple boy on 20th October 1889. He was insane and not fit to be tried until 1893. The Sessions Judge acquitted him on the ground of insanity on 9th May 1893. There is no mention of ganja in the record, but the Judge states a letter from the Jail Superintendent in 1889 had given the "probable cause of insanity as ganja smoking;" the grounds for this statement which appears to have been made by an Assistant Surgeon are not apparent. The papers received at the Asylum from the Magistrate of Faridpur in 1890 show that the lunatic was *not* addicted to ganja or other intoxicants and that no cause could be assigned for his insanity. The Asylum Superintendent stated that the cause of insanity was unknown, and that the man was subject to relapses.

237. Evidence of BABU GIRISH CHANDAR DE, Delegate of the Total Abstinence Association, Bhawanipur.

Oral evidence.

I am deputed by the Total Abstinence Society of Bhawanipur, of which I am a member, to state their views on the hemp drugs.

I am not aware what steps the Society took on receipt of the Commission's invitation in August. I have not seen the letter dated 19th August, stating that the Association hoped to send in due course a written statement embodying their views. The first that I knew of the matter was that the Vice-President and Secretary met last Saturday and decided to depute two members, myself and another, to appear before the Commission, and represent the views of the Association. I appear, as the other member has sickness in his family. The Society consists of 200 members. As far as I know, there has been no meeting of the Society or of the Executive Committee to discuss the question. I don't know if the Society has ever recorded its views on this question. I have not received instructions as to what I am to say, but the Secretary has given me his personal views, which I have made note of. The Secretary was not the other man appointed to represent the Society. I have come forward to state separately my own views and those of the Secretary. But of course I cannot say that I in any way represent the Society of 200 members. I have taken a good deal of trouble, since I was appointed to appear before the Commission, in making enquiries, and hold my own views, which I wish to place before the Commission.

My age is 30. I am L.M.S. of the Calcutta University of the year 1889. I have been in private practice in Bhawanipur and Kalighat since that year. I am not M.B., as stated in the letter of the Secretary of the Society.

Kalighat is a great seat of ganja smoking, and I have seen many smokers. I have treated nearly a dozen of them for pneumonia, dysentery, and insanity. I have treated nearly half a dozen pneumonia cases, four or five of dysentery, and two of insanity, one of a violent and one of a mild type in ganja-smokers. One of the latter was debilitated and afflicted with boils. I have treated not less than 25 or 30 cases of pneumonia altogether. I have treated 100 or more cases of dysentery, and five cases of insanity, including the two ganja smokers mentioned above. This practice has been during the last three years.

I should like to see ganja consumption restricted more than at present. That is my chief view in coming before the Commission. I do not wish for total prohibition. I do not know to what point restriction has gone at present. What I mean is that I want to see the drug less used by the people than I have seen it used in the places I know—Bhawanipur and Kalighat. Of other localities I could only speak from hearsay. Apart from Bhawanipur and Kalighat, all that I know about the consumption of the drug is what I have heard from the Secretary about the Chowbes of Muttra and the sanyasis of Budh Gaya. My personal experience leads me to favour restriction

short of prohibition. This could be effected by making the drug less accessible to the people; but how this could be done is more than I can say. At present every one can get ganja or bhang for a pice or a couple of pice. I should like to see the drugs made dearer. Of the three I should like ganja to be the most expensive, next charas, and then bhang. If it were possible to prohibit ganja alone, I should like to see it done, leaving charas and bhang to be used under restriction; but I am not sure that it would be possible. I don't know at what price ganja is now being sold in Bhawanipur; but I sent a pice, and they gave me a bit of flat ganja about the weight of a quarter tola, enough for one chillum. I know one pice worth goes to fill a chillum. I don't know the price of charas or bhang, and I did not know the price of ganja till I sent for the one pice worth. I would like to see ganja made inaccessible to lunatics and youths up to 16 at least. Government should not allow them to use any. I am not prepared to say that Government should lock up all lunatics. I have seen the patient I was talking of going to the shop morning and evening. There should be a prohibition against sale to a lunatic. I have no other suggestion to make in regard to the administration.

I have seen so much of the evils caused by the

drugs that restriction appears to me necessary. I have found people become pale and emaciated on beginning to smoke ganja, and after three or four months to become thoroughly changed for the worse, mentally and physically. I judge that these are the effects of the drug, because people, before using the drugs, were healthy and bright and intelligent. I have seen these effects in members of families I have visited in the course of my practice. I can remember at least a dozen cases which showed the above changes in three months. All these were sons of families I visited, and, except in one case, the other members of the families did not smoke. The young men were scapegraces who had taken to evil courses against the will of their families.

Kalighat is probably worse than any other part of Calcutta in the matter of ganja smoking, and it is the evil effects I have seen there which make my heart bleed and make me wish to lay my views regarding restriction before Government.

Ganja is worse than alcohol. Alcohol does not make people so utterly useless and worthless as ganja does, at least among respectable families. Among the lower classes also, I think ganja is the more harmful. This is my experience in Kalighat.

238. *Evidence of the INDIAN RELIEF SOCIETY, Calcutta.*

Introductory.—Hemp Drugs.—The hemp drugs include in their category, ganja, siddhi or bhang, charas and majum.

Ganja consists of the dried flowering tops of cultivated female hemp plants which have become coated with resin in consequence of having been unable to set seeds freely.

Siddhi or bhang, subji or patti are different names applied to the dry leaves of the hemp plant, whether male or female and whether cultivated or uncultivated.

Charas is the name of the resin which naturally exudes from the flowers and leaves of the hemp plant.

Majum or majun is a preparation of ganja or siddhi.

Ganja.—The cultivated ganja of Bengal is grown in only a very small tract of country within a circle having a radius of about sixteen miles. In this small tract, it occupies an area of about 3,000 bighas lying in three districts, viz., Rajshahi, Dinajpur and Bogra, and is called Ganja Mahal. Ganja is also prepared in the Gurjats of Orissa. The manufacture is simple. It consists chiefly in drying the plants, getting rid of the leaves and part of the stalks and compressing the smaller twigs and flowers into bundles. There are three kinds of it, viz., flat, round and chur according to the process of manufacture.

Its use.—It is used by people for intoxication in the form of smoking by mixing 25 to 30 grains of the flowers with dry tobacco leaves. The intoxication lasts for several hours and permanently injures the constitution.

Medical testimony.—The evil effects of this intoxicant have been testified to not only by medical authorities, but also by high Government officials. Dr. Chevers, in his standard work on

Medical Jurisprudence in India (p. 504), writes as follows:—

“Late in their miserable career the ganja-smoker and the opium-eater become utterly shattered, alike in mind and body..... The ganja-smoker and bhang-drinker often remain chronically inebriated and are sometimes excited to acts of frantic violence. A madman, who had used ganja, would probably continue insane for months, if merely confined without medical treatment.”

Again (p. 541)—

“It is a matter of popular notoriety both in Bengal and the North-West Provinces that persons intoxicated with ganja are liable to commit acts of homicidal violence; hence we find several cases in the Law Reports in which the accused urged the plea of intoxication by ganja in mitigation of their crimes.”

Dr. Chevers also mentions several cases of “running amuck,” as it is called, where a man madly attacks and stabs every person whom he meets whilst he is in this state of frenzy. Dr. A. Hilson, late Inspector-General of Civil Hospitals, thus wrote in his Annual Reports of the Lunatic Asylums in Bengal (1890, p. 5), Statement VII, para. 14:—“Causes of Insanity.—one of the chief features in this return is the evidence it affords of the potency of ganja-smoking in the production of mental disease.....” Again (1891, p. 4) Statement VII, para. 15:—“As usual, this return shows that ganja smoking is the most potent cause of lunacy. The general opinion confirms this, and I am inclined to believe it.” It has been ascertained that nearly 26 per cent. of the inmates of lunatic asylums are recruited from ganja-smokers.

Kabirajes of renown have also testified to the evil effects of ganja. Their opinions are appended here (*vide* App. I).

Government testimony.—The Government of India, in the Orders of 29th April 1875, noted as follows:—"If the use of the drug (ganja) could be altogether suppressed without the fear of leading to its contraband use, such a course would be justified by its deleterious effects." The Secretary of State for India in Council in his Despatch of 17th June 1875, confirmed the policy. The Lieutenant-Governor of Bengal (Sir Ashley Eden) in a Resolution dated 7th August 1877, noted that "the Lieutenant-Governor has himself no doubt that the use of ganja, in any form, is injurious to the consumer." Mr. H. J. S. Cotton, Secretary to the Government of Bengal, in a Resolution dated 3rd October 1890, p. 7, notes on behalf of the Government as follows: "The decrease in consumption is satisfactory." Mr. C. T. Buckland, late a Member of the Board of Revenue, Bengal, L. P., in an article in the *National Review* (January 1884, p. 627) writes "it remains to be considered whether Government would not do well and honorably to clear itself from all connection with the cultivation and sale of such a noxious and abominable article (ganja)." Mr. E. V. Westmacott, late Commissioner of Excise, Bengal, in his Report on the Financial Result of the Excise Administration in the Lower Provinces (1890-91, p. 36) writes thus: "I think it must be held satisfactory that with decreased consumption of this most pernicious article....."

The cultivator.—The position of the cultivator of ganja is the first point to be carefully considered. Nearly three thousand families, mostly Musalmans, are occupied in the cultivation of ganja (E. A. R. 1892-93, p. 36). Some of these use their own capital, others raise the requisite money by borrowing at rates of interest varying from one-half to one anna per rupee per month (Kerr's Report p. 29). The hemp-cultivators have almost formed a separate class. The majority of them cannot read or write and not a single man among them keeps an account of the sums expended by him in growing the crop (*Ibid.*).

Cost in Cultivation.—In respect of the cultivation, it has been ascertained that the raiyat is out of pocket by the following sums per each bigha of cultivation (Kerr's Rep. p. 29):—

	Rs.	a.	p.
Putting fresh earth on the ganja field	4	0	0
Oil cake	5	0	0
Fee of the Ganja-Doctor including his feed	3	6	0
Irrigating charges	6	0	0
Rent	3	8	0
Total	21	14	0

To these have to be added the wages of the servants of the house, the value of the labour of the members of the family themselves, the hire of the ploughs, the price of the cow-dung, the value of green plants, seed, etc. "The true cost of cultivation may therefore be stated in round numbers to vary from Rs. 50 to Rs. 60 per bigha." (Kerr's Rep., p. 29.) The cultivator has again to spend a further sum for the preparation of ganja. (Kerr's Rep. p. 30.) To all this is to be added the item of exorbitant interest that is to be paid to the money lender. (Kerr's Rep. p. 29.)

N. B.—It is to be noticed here that the above figures represent the costs which the ryots had to incur in or before 1876. Since then the value of labor, the price of articles, the rent of land have greatly increased.

Produce.—Now, what is the average produce

per bigha? In the Excise Administration Report 1892-93, p. 36, we find it is stated as 3 mds., 7 seers and 11 chittaks for the past 5 years. (*Vide* App. III A.)

Cost in Manufacture.—The cost of manufacture of flat ganja is Rs. 4 per maund and that of round Rs. 13 per maund (Kerr's Rep. p. 30.)

N. B.—It is to be noted here that the value of labour since Mr. Kerr noted it has considerably increased and the cost of manufacture must now be greater.

Total cost.—Well, then, the cost of cultivation and manufacture of flat ganja is Rs. 23-6-0 per maund, being Rs. 19-6-0 for cultivation per maund plus Rs. 4 for manufacture, and that of round ganja Rs. 32-6-9 per maund (being Rs. 19-6-0 for cultivation + Rs. 13 for manufacture per maund).

N. B.—The interest on money borrowed by the cultivator is excluded from the above calculation.

Wholesale prices.—And what are the prices these commodities fetch to the cultivators? The average of 1892-93 (E. A. R. p. 37) of flat was Rs. 16 per maund and of round Rs. 20-4-0 per maund. But as the Report aforesaid speaks of a fall in the wholesale prices as the result of the promising nature of the season's crop, and as the ruling prices during 1891-92 and 1890-91 are spoken of in the respective Reports as abnormally high, we shall take the wholesale prices of 1889-90 (E. A. R. p. 20) although they are spoken of as "enhanced" wholesale prices. They are Rs. 22-8 for flat and Rs. 30 for round on an average.

Loss.—In comparing the above with the cost of cultivation and manufacture, we find that the cultivators are losers in the case of flat ganja by 14 as. per maund (Rs. 23-6—Rs. 22-8-0) and in the case of round ganja by Rs. 2-6-0 per maund (Rs. 32-6-0—Rs. 30.)

Further loss.—It must be here added that more than 15 per cent. of ganja produced are left unsold on an average every year (*vide* App. III B.), and this factor must be taken into consideration. There is another important fact. The cultivators do not unfrequently fall a victim to the cunning of brokers and wholesale dealers. The sale of ganja is not always made for ready cash. "Indeed, in the majority of sales only part payments are made and the balance promised to be paid on a subsequent date; but in many cases the debt thus left behind by the dealers is not entirely discharged." (Kerr's Rep., p. 34.) Sales are generally made through brokers. "Oftentimes a wholesale dealer finds another way of cheating the raiyats and that is by making the payment in kind. They give to the cultivators in lieu of cash, clothes, brass and belt-metal utensils, mats, fans, etc., for prices much greater than their ordinary value." (*Ibid.*)

Further Proof.—So, the ganja cultivation is altogether a losing concern. We are confirmed in this opinion from the fact that ganja cultivation was formerly carried on in Jessore, in which district it has now ceased to be carried on. It can be safely inferred that the cultivation could not die out if any profit could be made out of it, as no profitable cultivation can die out.

Why cultivate still?—It is positive that the raiyats are always all losers. But a question might be asked why do they then grow hemp at all? First, because the practice is hereditary and they do not care to reckon up their gain or loss by the cultivation. Secondly, because their wants are simple and the whole family strive to eke out a

miserable living by their joint labour, and if they fail in it, they curse their fate and mourn. And thirdly, because they have not the power to reckon up their gain or loss, as they keep no account at all for doing it.

To their rescue.—It is the duty of the Government to come to the rescue of the cultivators. Tobacco, chillies, potatoes and several other crops can be grown on the rich highlands which are now devoted to ganja. The venture would prove very remunerative, especially as a railway now runs through the heart of the ganja-growing country, which would open up the market for any kind of valuable produce. There can be little doubt that the cultivation of ganja could be easily suppressed by the authority of Government. Mr. Buckland writes as follows: "The same power which enacted the law now in force prohibiting the cultivation of ganja without the license of a Government official, could easily prohibit it altogether, either directly or indirectly. If the licenses were withdrawn, the cultivation would cease, or if the conditions on which the licenses were granted were made more difficult, the cultivators would no longer care to apply for them." *Vide National Review, January 1884.*

A Plea for Ganja.—It has been urged that if ganja trade were suppressed, the people who use ganja would then be compelled to have recourse to some other drugs of more deleterious character. It is not easy to suggest what these other drugs may be; but it is difficult to find any that would be more deleterious than ganja or equally so.

Government loss.—The revenue that the Government derives from this "immoral trade" is little over 23 lacs a year (*vide App. iii c*). And surely for fear of being deprived of this revenue, the Government should not make any scruple to suppress the cultivation of ganja and prohibit the public sale of it in any form by law. Some provision might, perhaps, be made for the sale under medical advice of the produce of wild hemp through licensed chemists and druggists as some doctors assert that it has some medicinal qualities.

Hemp Drugs Consumption.—The consumption of ganja and its subordinate varieties is ever looked upon by the Hindus as positive vices. Mr. Kerr estimates the number of ganja-smokers in the Lower Provinces and the North-West as not more than 80,000 people (*Rep., p. 45*). And he arrives at this figure by estimating the quantity sold to be little above seven thousand maunds, which is far above the average (*vide App. iii B 2*). The agricultural class generally avoid it; the artizan, the syce, the sweeper and the mendicant use it.

Their Privation.—The privation of the use of any of these drugs would not be serious. The sanitary records of the Indian jails do not show that convicts accustomed to the use of these drugs have suffered by being deprived of them. The reports of the lunatic asylums show that a large number of admissions *at supra* are from the evil effects of ganja-smoking in especial. While there, they are not allowed to indulge in hemp drugs for that aggravates the malady. When these people come out cured, their habits of life are changed. It would be simply ridiculous to think that the discontent due to prohibition would be serious, nay, would amount to a political danger.

Bhang.—Now to turn to bhang or siddhi. It grows wild in many districts and especially in the Rajshahi Division, in Monghyr and Bhagalpur and the Tributary States (*E. A. R., 1892-93,*

p. 40). Bhang is generally used as decoction and is believed to be much less deleterious than ganja. The total revenue derived from bhang is Rs50,000 on an average (*vide App. iii D*).

Charas.—Charas is obtained from Amritsar and Allahabad (*E. A. R., 1892-93, p. 22*). It probably represents the deleterious essence of ganja in its greatest purity and strength. Happily, charas is seldom or never used by natives of Bengal. It can never be grown in Bengal and the importation can easily be prevented. The total revenue derived from this article is less than 9,000 on an average (*E. A. Rep., 1892-93, p. 42*). There can be no two opinions as to the necessity of suppressing the consumption of this highly deleterious drug altogether.

Majum.—Majum or majun is only used by the dissolute for exciting their animal propensities (*Kerr's Rep., p. 11*). Fortunately, very little majum is used in the province. The total revenue derived from it is less than Rs2,000 on an average (*E. A. Rep., 1892-93, p. 42*). This preparation is not supposed to have any medicinal qualities whatever, and there could not be the slightest hesitation in putting a stop to its consumption.

Religious Sanction discussed.—The next point to be considered in this connection is as to the religious sanction in the use of the hemp drugs; or in other words, whether in suppressing the use of the hemp drugs the Government would be interfering with the religious usages and customs of the people. At first sight it seems to be merely an idle plea for a Government which has stated in emphatic (though impolitic) terms that it would meddle with any custom or usage of the people, however well-sanctioned that might be by religion, if it forsooth was considered opposed to its own idea of morality. But to discuss the subject on its merits. The issues should be clearly understood. It must first of all be noticed that charas and majum and ganja as now used are never sanctioned by religious custom or usage. As for ganja, we append here (*vide App. ii*) the *vyavasthas* (opinions) of eminent pandits which condemn its use and declare that except some reference to it in the Tantras, which are considered modern interpolations, there is no mention of it made in any other Shastras. The theory of religious sanction for the use of ganja gets a rude shock when we examine the way in which people of this country take to it. In fact, it is not enjoined in one or the other Shastras, but is used because it serves as a cheap and powerful intoxicant. We are confirmed in this opinion by the statement in the Excise Administration Report, 1892-93, *p. 40, viz.* "It is reported by the Collectors of Bankura, Birbhum, Hughli, Nadia, Jessore and Shahabad that people of the poorer classes are taking to ganja on account of the high price of distillery liquor, which they can ill afford to purchase."

Next, it has been pointed out that siddhi is a favourite offering to the god Siva. In fact, at the great shrine of Tarkeshwar, siddhis are cast over the phallus by devotees from all parts of India. That on the last day of the Durga Puja festival it is offered to every guest and member of the family. It must be noted here that the offerings of siddhi to the deity and the guests are made only as symbolic for victory and success (*Sanskrit siddhi, victory or success*). In fact, it is not incumbent upon any one to drink draughts of it on those occasions, but as has been put by Mr. Kerr in his report, *p. 11*, "those who do not like to take it, put a drop of it in their tongue by

way of acceptance." This practice is followed by all respectable people. And whenever siddhi is drunk, it is done only for intoxicating purposes.

Even supposing that siddhi cannot be suppressed altogether, there can be no valid excuse for the non-suppression of the other three drugs which, as has been already pointed out, are positively deleterious and vicious.

Loss—how to be recouped.—The last point for consideration is how to recoup the loss of revenue to the Government resulting from the suppression of ganja and its subordinate varieties. It has been pointed out that the total revenue derived from the hemp drugs is nearly 24 lacs a year. An enlightened Government such as ours, it is to be hoped, is quite competent to devise means for the recoupment of a petty loss like this for such a cause as the emancipation of 80,000 people from the use of these degrading and demoralising drugs and for the welfare of the cultivators thereof who are being ruined by its cultivation.

Suggestions.—A few suggestions may however be respectfully made:—

I. Economy—A wise parsimony is one of India's greatest needs. Civil salaries of European officers in Egypt and Ceylon are much lower than those of European officers in India. With the increased facilities for communications with Europe and furlough, privileges, etc., the condition of service in India for Europeans has considerably changed. And surely the scale of pay and pensions of the said officers need revision. If, however, it is considered that Europeans cannot serve with a lower scale of pay, native agency in the Government might be more largely used and thereby an important economy might be effected, as they would not only serve with a lower scale of pay and pensions but also the large amount of payments for non-effectives will thereby be greatly reduced. Retrenchment may also be effected in the cost of the annual migration to the hills and the subject of compensation allowances may be carefully considered.

II. Duties on cotton goods might be reimposed. The price of the goods thereby raised would not bear hard upon the people. By this process the country products will also be protected.

III. Income-tax might be increased raising the taxable minimum to Rs. 1,000. The rich are principally affected by it, the mass of the people are not.

IV. Savings—By the suppression of the ganja trade, retrenchment in the excise establishment may also be effected. Not only reduction might be made on account of a good portion of the excise work having been taken away, but also certain number of Excise Officers might be profitably employed partly on excise and partly, say, on income-tax. The item of expenditure for rewards out of State funds for detection of offences against the Excise Law, would be diminished and at the same time an addition to the revenue by way of fines be made.

Lastly—There is another aspect of the question. The suppression of the use of the hemp drugs would diminish, by about 30 per cent., the inmates of the State Lunatic Asylums, who are maintained at the cost of the Government. It may be reasonably inferred that the reduction of expenditure on this head on the State Lunatic Asylums would go some way to balance the loss of this item of excise revenue.

APPENDIX I.

[1]

(Translation.)

SREE SREE DURGA.

The sense in which the word Ganja is used now-a-days, cannot be traced in ancient Vedic Ayurveda or famous Tantras and others. Its habitual use in large doses brings on consumption, dysentery, flow of blood, etc. Consequently its use in that manner ought to be avoided. People who smoke ganja, are likewise generally hated in society.

(Sd.) Sree Gangapersaud Sen Gupta.

(Sd.) Sree Dwarkanath Sen Kabiraj.

(Sd.) Sree Peary Mohun Sen Kabiraj.

(Sd.) Sree Bijoyratna Sen.

(Sd.) Sree Lukhinarain Sen.

(Sd.) Sree Gopee Nath Sen Kabiraj.

[2]

(Translation.)

SREE HARI SHARANAM.

No mention of the article that is used as ganja or ganja now-a-days can be found in ancient Ayurvedic Shastras. At the present day it is seldom used for medicinal purposes; and that without any appreciable beneficial effect. Moreover, by its use people are found to become disordered and peevish. Further it is considered by all medical men that various serious nervous diseases and diseases of the lungs, heart, liver, and other organs are sure to result from the use thereof.

The use of ganja is never admitted to be respectable in any society in Hindusthan.

(Sd.) Sree Gopeemohun Roy Kabiraj.

(Sd.) Sree Lukhinarain Roy Kabiraj.

(Sd.) Sree Bunko Behary Mullick.

(Sd.) Sree Binodlal Sen Kabiraj.

(Sd.) Sree Kali Das Gupta Kabiraj.

(Sd.) Sree Nagendranath Sen Gupta.

(Sd.) Sree Koylas Chunder Sen.

(Sd.) Sree Upendranath Sen.

(Sd.) Sree Debendra Nath Sen Kabiraj.

APPENDIX II.

(Translation.)

SREE SREE SYAMA PADA BHARASA.

The use of ganja is never sanctioned in the Vedas or other Shastras. There will be no violation of religious ceremonies in foregoing the use of ganja altogether.

Siddhi although sometimes used in the worship of the gods, yet the use of it by men is never intended in the Shastras. There will be no violation of religious ceremonies sanctioned by the Shastras, if the use of siddhi is avoided once for all.

(Sd.) Sree Prasanna Kumar Nyaratna.

(Sd.) Sree Lukkhi Chander Sankhathirthha.

(Sd.) Sree Chundi Churn Bhattacharjya.

(Sd.) Sree Kashi Chunder Tarkalankar.

(Sd.) Sree Durga Churn Smrithithirthha.

(Sd.) Sree Modun Mohun Bhattacharjya.

(Sd.) Sree Parbati Churn Tarkathirthha.

(Sd.) Sree Anund Chunder Sarbabhoum.

(Sd.) Sree Syama Churn Bidyaratna.

(Sd.) Sree Krishna Sunder Darshanshiroratna.

(Sd.) Sree Shital Chunder Vedantabaghish.

(Sd.) Sree Raj Kumar Nyaratna.

APPENDIX III A.

Year.	Number of raiyats engaged in cultivation.	Average produce per bigha.			Excise Administration Report, 1892-93, page 36.
		Mds.	Sr.	Ch.	
1888-89	2,449	3	15	14	
1889-90	2,480	3	13	5	
1890-91	2,882	4	20	2	
1891-92	2,517	4	23	10	
1892-93	3,429	2	5	9	
TOTAL .	13,757	15	38	8	
Average .	2,751	3	7	11	

APPENDIX III B.

1				2			
Year.		Quantity estimated to have been produced.		Year.		Quantity consumed.	
		Mds.	Sr.			Mds.	
1890-91		6,681	29	1890-91		6,095	
1891-92		6,040	6	1891-92		5,677	
1892-93		7,576	5	1892-93		5,451	
TOTAL .		20,297		TOTAL .		17,223	
Average .		6,766		Average .		5,741	

APPENDIX III C.

Year.	Total receipts from Ganja.		Excise Administration Report, 1892-93, page 39.
	Rs.		
1890-91 . . .	23,11,713		
1891-92 . . .	22,92,568		
1892-93 . . .	23,86,066		
TOTAL .	69,90,347		
Average .	23,30,116		

APPENDIX III D.

Year.	Consumption.		Revenue.	
	Mds.	Sr.	Rs.	Excise Administration Report, 1892-93, page 40.
1891-92	1,064	10	48,464	
1892-93	1,033	29	53,558	
TOTAL	2,097	39	1,02,022	
Average	1,049		51,011	

AMRITA KRISHNA MULLICK (*on behalf of the Indian Relief Society*).

Oral Evidence.

The Association on whose behalf I appear has connection with Mr. Caine's Temperance Association and is interested in ventilating the grievances of India; it is a political association. The members number 200 to 300. The Society's headquarters are in Calcutta and it has branches in almost all districts in Bengal. The views contained in the printed paper are the views of the Association. A special meeting was held in Calcutta, at which reports from the various branches were considered and the conclusions framed. A draft was circulated to every member in the mufas-

sal and in Calcutta, and the printed paper is the final draft as approved by the Association.

A second sentence of the paragraph relating to religious sanction refers to the emphatic terms which were used by the late Viceroy in passing the Age of Consent Bill.

The Association wish the name of Kali Das Gupta, Kabiraj, to be transferred from Appendix I (2) to Appendix I (1), and the names of Gopi Mohun Roy, Benod Lall Sen, and Upendra Nath Sen erased from Appendix I (2). These appendices were drafted by one kabiraj and handed over to another kabiraj to get the signature of other

kabirajes. The kabiraj who was going to get the signatures informed us that the people whose names appear under the appendices would subscribe to them, and therefore their concurrence was assumed before signature. The opinions of Kabiraj Gopi Mohun Roy and Benod Lal Sen have been separately submitted to a Committee of the Association, and are now tendered* as additional appendices.

The views of the Association are to suppress ganja, charas, bhang and majum, and to prohibit the cultivation of the hemp plant. The Association has considered the extensive use of ganja by devotees and fakirs, and sees no difficulty in depriving them of the drug. We are aware of the extent to which the drug is used by such persons all over India, and are of opinion that it is not necessary for them, and that they will have no real grievance if the supply is cut off. We have considered the use by the labouring classes, and we do not believe in the use remaining moderate for any length of time. The members of the Association are pleaders and educated gentlemen in Calcutta and mufassal towns. The devotees and labouring classes are not represented on the Association; but we had talk with some of them. Our experience of the lower classes is entirely confined to Calcutta and the mufassal towns.

The difficulty of suppressing siddhi is recognised in the paragraph relating to religious sanc-

* Not received.

tion. This difficulty arises from the fact that the hemp plant grows wild. Though people in remote villages might use bhang from the wild plants growing scattered about their huts, the use of it by the general public may be almost suppressed by stopping the licensed vend. I include in the general public not only the town people, but all the people of the country.

We have considered whether the suppression of ganja and other hemp drugs might lead to the use of alcoholic liquors; and we think that there is little danger of this, because (1) all Hindus and Mahomedans are by their religion forbidden to take wine; (2) wine is much more costly than the hemp drugs; (3) the raising of the duty on ganja has resulted in a decrease in the consumption of the drug without any corresponding increase in the consumption of liquor. With regard to the possibility of dhatura being substituted for the hemp drugs, it has been thought that people are afraid to use dhatura because it is poisonous and likely to produce insanity, and also that it cannot be had in sufficient quantity to replace ganja. Both alcohol and dhatura would be more harmful than ganja.

I am requested by the Association to draw special attention to that part of their paper relating to the cultivation of the plant, and the pitiable condition of the cultivators owing to their losses. The Association is aware that the cultivators are under no compulsion to cultivate the plant, but thinks the condition of the cultivators a reason for suppressing the cultivation.

239. Evidence of MAHARAJA DOORGA CHARAN LAW, C.I.E., Merchant, Calcutta.

16. Bhang is generally prepared, as far as I know, by people in their houses.

32. Siddhi or bhang is to a certain extent connected with the religious customs of this country, it being considered imperatively necessary to lay it as an offering in our pujas.

34. It would be a serious privation if consumers are to forego the use of the drug.

35. The prohibition would certainly cause serious discontent, the evil effect of which I am unable to estimate.

40. Yes; they are prescribed for their medicinal properties.

41. They are perfectly harmless when taken in moderation, and certainly operate beneficially for the purposes stated in clauses (a), (b) and (c).

42. Moderate use is harmless, as I have already stated.

43. I never heard of any disturbances to neighbours resulting from the use of the drugs.

240. Evidence of BABU NITYA NANDA ROY, Teli, Merchant and Zamindar, Chittagong.

1. My experience on the subject depends upon the reports from the persons who seem to have fair knowledge of the trade, use and consumption of hemp drug.

As I have no personal experience in many points under notice I have answered them from information I have gathered. However, trust my gleanings will be of some use before the Commission.

2. The definitions given here are equally accepted in this district also. These products are called in the same name, excepting bhang which is obtained in this place from a plant, namely, bhang grows spontaneously in Satkaniah and Fallickcherry. It is indigenous growth of the district, has narcotic virtue.

3. I am told in the Province of Behar and Districts of Rajshahi and Rangpur hemp grows spontaneously. This drug is imported article in this district.

4. It is known in Chittagong generally by name of ganja, sometimes called in by terms amongst hemp-smokers by name of "siddi" and "bara tamook." I do not know different names it bears in different countries. But the above refers to the same plant.

5. I believe, if cultivated, the hemp will grow in all elevated parts of Bengal, and if the seeds are kept in the tree in time when they will be strewn about by the wind, they will grow, though not luxuriantly in the very soil. I am not aware what special climate is necessary to grow wild hemp.

6. I have no idea of it.

7. No. Only for speciality in some gardens scarcely a tree or two are grown under permission of the Excise officer.

8. Never cultivated in the district.

11. I have no idea of it.

12. I do not know.

13. I believe it is not restricted, but the people in this part of the country do not cultivate it, as ganja is mostly imported from Upper Provinces.

There are many parts of Lower Bengal that would not produce ganja on account of the soil being merged under water for a good portion of the year.

14. Not in this district.

Dry leaves of bhang from special bhang tree is sold, but under Excise Act.

15. I have no idea of the difference of preparation in wild and cultivated hemp. So far I know that ganja is smoked after mixing it with tobacco leaf, and eaten by intermixing the ganja with sweetmeat; the preparation is called "Majum;" and the drug is made drinkable by grinding and mixing it with water, sugar, cloves, etc., which is called "Sabji."

16. Bhang is prepared from the special leaves of bhang tree in the house either drinkable or eaten with a lump of sugar. Bhang is not made from hemp plant. I do not know whether charas or ganja can be prepared from the wild plant.

17. There is no special class of people for preparing the drugs mentioned.

18. Yes, it keeps good for a year or more. It gradually loses its effect. Dampness is the chief cause of deterioration.

19. Ganja is mostly used for smoking. "Sabji," is occasionally made out of it by grinding the ganja and making "Serbet," for drinking sake. It is sometimes used for medicinal purpose. I have no knowledge where it is more prevalent, and also have no idea of charas as it is not used in the district.

20. Mostly fishermen and low classes of people smoke ganja. About 3 per cent. among the said class use ganja as intoxicating drug. I cannot tell in which localities it is more prevalent.

21. I cannot give correct information about it, but as flat ganja is mostly imported here, I surmise this kind is invariably and everywhere used in this district.

22. As said above, the charas is not in vogue here; if there be solitary instances, I do not know whence it is imported.

23. No; I mean the dry leaves of the special bhang tree.

24. People of North-Western Provinces generally use the bhang as refreshment, just as beer, claret, and cider are used in Europe. In the district this is used by the natives that have bowel complaints. It is efficacious in bringing the bowel in tone.

25. I am not in a position to answer it.

26. I have no idea of it.

27. For excitement and intoxicating purpose low classes of people, particularly those that are living on piscatory profession and the coolies going in the hills, are addicted to smoke ganja under a notion that the use of it gives energy to work and also alleviates pain of hard work.

28. I cannot exactly answer this question. This habitual moderate consumer of ganja not less than two pice a day would suffice, to habitual excessive consumer more than one anna.

29. I am told, among hard smokers when they want to increase the power of intoxication, opium or dbatura is mixed; but it is not generally the case, as they often extend the rounds of chillum for the said purpose.

Bhang massala is not sold separately in this district, but the consumers buy the ingredients from different shops. I am told the ingredients are cloves, pepper, sugar, milk or water, and sometimes to make the potation strong adds ganja leaf with it.

30. As far as I am informed, the habitual consumers take their daily quantity, but like company, and when gathered they practise more and want to extend the circle of smokers. Females and children do not use the drugs.

31. The habit is formed by evil association with the habitual consumers. It is not very difficult to break the habit. The habit naturally develops to excess when the usual quantity does not produce the required effect by continual use. It is like all other intoxicating drugs when used as a habit.

32. There is no social or religious custom or binding to admit of use of hemp. It is not essential at all for any custom whatsoever. Frequent use of it leads to formation of habit, and undoubtedly it is injurious.

33. By the better and thinking class of people, the use of the drug in all shapes is regarded with disgust and pity. There is no religious binding to use it, and therefore mostly the cultivating class of people and day labourers also look to the practice with abhorrence. I attribute this sentiment of disgust that people in general express is to the belief and experience that all narcotics muddle the head, injure health and cause unnecessary expenses; and also under the influence of intoxication often social and moral rules are violated to the great grief and disgrace of friends and relatives of the offenders. No worship of hemp plant is observed here.

34. I do not see any serious privation will necessarily be felt by the consumers, if they forego the habit. But the fishermen, etc., and the itinerant jogis or fakirs will feel the want for a time. The whole class makes a great minority against non-smoking class.

35. Prohibition of the use of the whole of the drugs, excepting bhang made out of special bhang plant, is very feasible. No doubt there would be illicit consumption at first, but if the stringent law be enacted and enforced, the practice will gradually fall off. Prohibition can be enforced by stopping the cultivation, importation and exportation of the drug. I do not suppose there will be serious discontent among consumers; they may grudge for a time and then all will wear off. There is no possibility of political danger. There is every probability that the stoppage would lead to other recourse, such as alcoholic stimulants and other drugs. But if law is also severe in that respect also, the consumers will be satisfied with their lot.

36. Yes; and I attribute this to the newness and relish of the foreign importation of alcoholic drinks. I have had instances of some of my acquaintances falling into this error.

37. I do not know.

38. I have no experience of it.

39. I do not suppose so. I am of opinion that the smoking of hemp is more injurious than eating or drinking it. Although I cannot give any sound reason concerning the medical operation of it, but my personal experience leads me to believe that smoking invariably deteriorates constitution, loses teeth sooner, and gives always bloodshot eyes.

40. I cannot exactly answer this question. But I know native doctors use the drugs for medicinal purpose. I do not know if it is used for cattle disease.

41. (a) I do not know.

(b) It alleviates fatigue, etc., I believe, more through forgetfulness while under the influence of intoxication than in its real effect.

(c) I do not know.

Coolies, fishermen and fakirs use it. Those that take it as a habit moderately, they think it is necessary for the above purposes. I don't see there is any necessity to take occasional dose of it for the said end.

42. I cannot say even the moderate use of it will be harmless, inasmuch as it will act upon the brain, and every day moderate use of it will gradually lead to excess.

43. Yes.

44. They say that it clears their head and power of vision, and it is refreshing too. It produces intoxication to a certain degree. I have no experience of the drugs having properties to allay or create appetite. But I am told by the habitual consumer that use of the drug gives them great zest for eating. The effect of intoxication lasts for 4 to 5 hours according to the quantity used. There is after-effect. They say they feel nervous prostration, dryness in the throat and chest. Subsequent gratification is not so much yearned after as in the case of alcoholic drinks, but at regular time a little use of it gives tone to the body and refreshes energy.

45. (a) Yes.

(b) No doubt it impairs the constitution, and generally chest disease follows by smoking.

(c) I do not know for certain, but I believe it will on account of its continual action on brains.

(d) Smoking causes asthma and chest disease.

(e) It greatly impairs moral sense.

(f) It certainly deadens intellect. I have seen persons not exactly insane, but have become idiot. The latter part I can't answer with certainty.

(g) I cannot correctly answer to this, but I have seen insanes smoking ganja, and their insanity had burst to highest pitch at the time.

46. I am of opinion that all intoxicating drugs act upon brain. And brain being the seat of all nervous action, nervous prostration will necessarily follow when the brain is overworked by habitual excessive use of the hemp drug. The abnormal functions of all organs lead to the premature decay of health; therefore it is not strange that the habitual excessive use of hemp drugs will produce the same consequence by working in the brain and exciting the blood. It is true that the re-action follows, but to bring back the system into its normal condition the consumers again have recourse to the drug without seeking any other means to have the desired effect or without suffering the

delay for the recovery by means of nature which would bring the system into its former tone. And therefore a continual excitement and action of brain is kept on, without knowledge of the consumers that great danger they are running into; idiocracy, insanity, brain and chest disease with their concomitant maladies gradually invade the system impairing both body and mental faculties. The feelings are blunted and reasons diminished, and therefore by loss of both physical and mental energies, laziness of habit and immoralities are engendered in habitual excessive consumers of hemp and other intoxicating drugs.

47. I believe the habitual moderate use of these drugs does not perpetuate the habit in the children of the moderate consumer, nor affect them in any way.

48. I am not sure that the excessive use of these drugs by habitual consumers will reproduce the same habit in their children; but when the physical power is enervated by continual use of it, children born after such enervation will certainly be affected; mostly the intellect is affected rather than the physique of the children. Use of bhang got from special bhang plant, does not materially injure either physique or intellect. It is remarkable among the people of North-Western Provinces to retain health and vigour after habitual use of the drug, even in excessive quantity. Their children do not suffer from their parents' indulgence in the said drug, but are always of healthy and blooming appearance.

49. I am told moderate use of ganja mostly when eaten gives excitement to the sexual desire. It is used by low prostitutes and libertines for the above purpose, because it has retentive properties to some extent as I am told. The use of it for the said purpose is indeed injurious, because it tells upon constitution by muddling the brain as well as by abnormal sexual intercourse. Continual excessive use of hemp by smoking tends to impotence, I believe, because after-effect of it is very sedative.

50. As I am told by a doctor friend of mine, I am of opinion excessive use of ganja drug cannot be practised as an aphrodisiac, because its sedative virtue appears soon after in the system, and all nervous actions and energies are benumbed under too much narcotic influence which paralyzes the active organ for the time being. Prostitutes apparently do not feel the want of function of their nerves or physical powers, for they are passive in their kind and capable of bearing. But actually the feeling, sense and desire are deadened in them by excessive use of the drug. They do not use it for the excitement of lust so much as for the sake of intoxication and forgetfulness of their misery. Ganja being cheaper intoxicating drug than alcoholic stimulant, low and poor persons and prostitutes have recourse to it. I have already shewn how the use of the drug for the sensual purpose is injurious.

51. There are many wily bad characters that use the drug moderately in order to retain their memory sharp, sense keen, eye clear, and ear acute for perpetrating crime with cunning, and at the same time use the drug only to give excitement to the action and to add extra amount of zeal and determination.

52. The excessive use of the intoxicating drugs by bad characters is of little use for consummation of their evil designs. When the head is confused, eye dim, ear dull, memory failing, hand benumbed, feet not agile under too much narcotic

influence, it will be next to impossibility to commit a crime without detection. Therefore the bad characters of true cunning type use the drug moderately and induce the followers to use sparingly before the commission of crime. But invariably the bad characters are addicted to intoxicating drugs to abandon the remorse of conscience, and to give desperation to their will.

53. Excessive indulgence in any of these drugs may sometimes incite to crime not thought of. I have known friends coming to blows under its influence. I have not had instances of homicidal frenzy, but I have seen persons thrown into utter despondency and evading society.

54. Yes; generally the criminals use the drug to fortify themselves for commission of vice as said above, and to suppress all compunction they may feel on account of inborn conscience.

55. Criminals to further their designs induce their victims to take these drugs in such quantity as to produce stupefaction. Large quantity of these drugs will produce the desired effect, but admixture will quicken the action. I need not go far to give an instance of such type of criminals. Case of Tarkeshwar mohanta is a living illustration.

56. Use of hemp in moderate degree is not very serious, but the excessive indulgence of it or compound admixture of it for the purpose of increasing the intoxication is very injurious to health. Dhatura is more mixed for administration to others than for personal use.

57. I am told when ganja is drunk, the effect is more active and immediate than when smoked.

58. As it is, it is working well in suppressing smuggling and increasing excise revenue.

59. I have no idea of it.

60. It is not produced in this district, and I have no experience of ganja cultivation.

61. Charas is not produced in this district.

62. While there is separate plant called bhang grown in this district, production and cultivation of hemp for making bhang is not necessary here.

63. I have no objection in the present system of excise working, and therefore cannot suggest any improvement.

64. I have no objection on the present procedure of importation, exportation and transport of hemp drugs.

65. I have no idea of it; if increase of taxation could decrease the use of intoxicating drugs I would recommend increase of taxation, or I would suggest abolition of all taxes on all intoxicating drugs with stringent prohibitory law to suppress the use of the said drugs.

66. I don't see any reason to make different rates of taxation on different sorts of ganja while the properties are same.

67. I have no objection of the present method of taxing.

68. In my opinion licensed houses or shops vending the drugs should be few and far between.

69. I am informed the wishes of the people are consulted and considered before the license is granted to any locality. Excise officers make enquiries. Public opinion ought to be considered.

70. I have not come across any facts of importing or smuggling the drugs from any Native States to this place. The duty is regularly paid, and there is no untaxed drug as far as my knowledge of it goes.

241. Evidence of BABU NOBIN CHANDRA SARKAR, *Kayasth, Wholesale and retail vendor of ganja and bhang, Barisal.*

1. As a wholesale and retail vendor of ganja and bhang at Barisal.

2. Yes; flat ganja is called "chapti".

Round is called "gol".

Broken is called "chur".

Bhang and siddhi are equivalent terms. Charas is not consumed in this district.

3. Ganja is cultivated at Rajshahi.

Bhang is brought from Calcutta. The source of supply is not known to me, most probably from Monghyr and Bhagalpur.

4. Ganja is known as ganja, and bhang or siddhi as such.

5 and 6. Not known to me.

7. Yes; (a) at Rajshahi for ganja.

(b) Charas not known to me.

(c) Bhang probably in Behar.

(d) Not known to me.

Extent not known to me.

8. Not known to me.

9. Ganja-planting is commenced in Kartik corresponding to November, and the crop is gathered in Mag and Falgun, i.e., in January and February. It is cultivated on selected soil of raised level. The land is thoroughly ploughed and earth beaten down to dust.

10. No. They are ordinary agriculturists.

11. Never.

12. Not known to me, but the male plant, i.e., of bhang, is extirpated to ensure the prolific growth of the female plant, i.e., of ganja.

13. Yes; at Rajshahi and some neighbouring portions of Bogra and Dinajpur. Possibly under Government orders. Not common to all districts. Not known to me.

14. Yes, except charas.

(a) Ganja at Rajshahi.

(b) Charas not known to me.

(c) Bhang in Behar.

Extent not known.

15. (a) Ganja is smoked with huka and chillums.

(c) Bhang is drunk by pounding it with water or milk and sugar, and in some cases with spices and scents.

16. Bhang is prepared for home consumption. Bhang can be prepared from wild hemp of spontaneous growth. Ganja and charas cannot be prepared from the wild plant.

17. Generally by Hindus. Rarely by Muham-madans.

18. Deteriorates by keeping, but is not totally

lost. About three years ; causes of deterioration not known to me.

19. Ganja is not only used for smoking, but for medicinal purposes also. Extracts and tinctures of ganja are used in the undermentioned diseases :—

(i) Cholera, (ii) Diarrhoea, (iii) Dysentery, (iv) Tetanus.

20. Low class Hindus and jogis and sanyasis and prostitutes smoke ganja. A few gentlemen use it secretly. In this town about 50 per cent. of the aggregate population use ganja.

21. Flat small twigs.

22. No charas shop here. Extent consequently not known.

23. Bhang is smoked rarely.

24. Bhang is drunk to a great extent by up-country men (Deswalis) and gentlemen and middle class men who cannot afford to pay for expensive alcoholic drinks.

25. Ganja, stationary. But the use of bhang is gradually increasing owing to reasons above stated.

26. Ganja.—(a) habitual moderate consumers—middle class men and prostitutes.

(b) Habitual excessive consumers—up-country men, jogis and sanyasis, and Namasudras or Chandals and other criminal classes.

(c) Occasional moderate consumers—gentlemen who use it secretly.

Bhang.—(a) gentlemen of poor means.

(b) Up-country men.

(c) Generally by all classes on the last day of the Dasahara festival (Bijaya day) and during Doljatra or Holi.

27. Ganja.—(a) middle class men who cannot afford to pay for expensive drinks (alcoholic) or those whose tastes and propensities have been vitiated by bad company.

(b) Up-country men as a rule are hard smokers. Sanyasis and jogis use it freely for religious principles, and Chandals generally belong to the criminal classes.

(c) Gentlemen who use it to bad habits contracted in early life.

Bhang.—(a) gentlemen who cannot pay for alcoholic drinks.

(b) Up-country men are hard drinkers of bhang.

(c) Owing to religious principles.

28. Ganja.—(a) About two pice worth.

(b) About two annas worth per diem.

Bhang.—(a) Quarter pice worth.

(b) One to two pice worth per diem.

29. Nothing with ganja; but with bhang—milk, sugar and spices are used for increasing the intoxicating power of the drug.

“Bhang massala” is not known here, but majum is used.

30. Ganja is generally used in company by men and sometimes by prostitutes and baistabs, after attaining the age of 20 up to old age. It is not known whether ever children of under age smoke ganja.

31. Yes, but it is difficult to break off the habit of smoking ganja. Bhang-drinking can be easily

abandoned. The use of ganja is not on the increase, but the use of bhang is increasing amongst moderate consumers.

32. Bhang is used to a great extent during Bijaya day, i.e., the last day of the Durga Puja and during Doljatra or Holi, but not essential; temperate. No; it won't lead to the formation of habit.

33. Public opinion is against ganja-smoking, but the drinking of bhang is not much in disrepute. Not known to me.

34. Yes, with excessive smokers of ganja. Not known to me.

35. No; but there ought to be some restrictions regarding its consumption. It will be consumed illicitly; prohibition cannot be forced. There will be great discontent amongst hard consumers, but there is no political danger. (a) and (b), yes.

36. No; not known to me. This is a mere surmise. It may be so in rural tracts under the distillery system.

37. No charas here.

38. It is said that the intoxicating power of flat and chur ganja is superior to that of round ganja.

39. Not known to me.

40. Bhang is generally used for medical purposes by kabirajes and for cattle diseases as well. A mixture of ganja with oil is used for itches and other skin diseases.

41. Bhang is digestive. Ganja gives staying-power under severe exertion or exposure, and is said to alleviate fatigue amongst those who use it. Not known to me.

42. Not known to me.

43. Yes.

44. The immediate effect is that it refreshes the moderate smoker of ganja, not much but to a little extent; with moderate smoker it increases the appetite, but with inveterate smokers it is different. The effect of the intoxication from one chillum of ganja lasts about two hours. No after-effects if taken after regular intervals. Want of subsequent gratification produces uneasiness. The intoxication from bhang lasts about 24 hours; no palpable after-effects, but increases appetite.

45. Ganja impairs the constitution, but does not cause loss of appetite with proper nourishment of rich food. The effect is not palpable, but with hard smoker the free use of ganja results in dysentery, asthma, bronchitis and other bodily ailments. It causes laziness, but does not necessarily lead to immoral habits; with hard smokers sometimes produces temporary insanity, but not of a very offensive type. Possible; not known to me. But bhang does not produce insanity at all.

46. See above.

47 and 48. Never; no hereditary effect.

49 and 50. Not known to me.

51. Yes, bad characters are said to use ganja and bhang freely before they commit any offence.

52. See above.

53. Possible, but not known to me.

54. Not known to me.

55. No such case known to me. But it is said that railway passengers and travellers in unfrequented thoroughfares have been drugged by designing men.

56. Inveterate smokers sometimes mix dhatura seeds with ganja; the effect is increased intoxication

and frequently results in temporary insanity, and easily provoking temperament.

57. Never, but they are always smoked.

58. The rules are already stringent in this district owing to restricted issue of ganja to the retail vendors and needs no administrative change at present.

59 and 60. I cannot suggest.

61. No charas here.

62. Ganja is already cultivated under Government control within restricted area. Bhang should also be similarly cultivated.

63. No, no suggestion to make.

64. No, the present administrative regulations are sufficient.

65. Present rate of taxation sufficient.

66. Yes, different rates for different kinds, but the issue of chur ganja should be discontinued.

67. No.

68. Yes, but not consumed on the premises.

69. In this district local opinion is taken into consideration before opening a shop. Within municipalities the municipal authorities are consulted, but in villages public opinion is of little value.

70. No importation from Native States. Yes; no untaxed drug used here.

242. *Evidence of BABUS DURGA DAS CHANDRA, Gumasta of Jadab Chandra Das of Calcutta, and ANNADA PRASAD RAI, Gumasta of Prionth De of Calcutta.*

Oral evidence.

We go out into the villages and collect bhang for the goladars. This year we exported 403 maunds—one of us 98 maunds and the other 305 maunds. We collected this amount without difficulty in 25 or 30 villages. We could easily have got double the amounts. We could have got 5,000 maunds in those 30 villages if we had wanted it. Every bigha would give 1½ maunds. We cannot say how much bhang we could not get from this district (Bhagalpur). It grows principally in the Gangetic villages in the north of the district near the Kosi river. We collect bhang from the Purnea District also. It grows

on the sandy banks of the Kosi, and is of superior quality in that region. Bhang does grow in the cultivated lands, but that which grows on the sand banks is the best. We collect some from the fields, and the people do not object to its being removed. Bhang grows abundantly in the districts of Bhagalpur, Purnea, Saran, Champaran, Monghyr, and Darbhanga. In the Rangpur and Nadia districts it is scarce and not fit for use. We pay nothing for what we collect in any place. In the rivers it grows amongst the *jhao* jungle. No one cultivates bhang. We never make previous agreement with raiyats to keep the bhang for us. They do sometimes ask us to clear it away. We engage the coolies and pay them.

243. *Evidence of BABU DHANI RAM SAHA, Excise Vendor, Mymensingh.*

1. I am an excise vendor for a period of about 30 to 35 years. I have been a wholesale dealer of ganja for a period of about 20 to 25 years.

2. The definitions may be accepted.

3. Bhang grows wild in Sylhet, Tippera, and Mymensingh.

4. It is known by the name bhang plant.

5. A low soil and scanty rainfall are necessary.

6. Ordinarily dense.

7, 8, 9 and 10. No experience.

11. No.

12. No experience.

13. It is restricted to the districts of Rajshahi and Bogra.

14. (a) Produced in Rajshahi, but to what extent I am not aware.

(b) Produced in Rajshahi, but to what extent I am not aware.

(c) No experience.

15. No experience.

16. Bhang is prepared by the people generally in their houses. It cannot be prepared from the plant wherever grown. Ganja and charas cannot be so prepared from the wild plant.

17. By haluadars and Muhammadans.

18. These drugs deteriorate by keeping. They do not quite lose their effect in time. Ganja and bhang keep good with ordinary care for one year. I am not aware of the causes of deterioration. If

ganja be kept in air-tight boxes, I think the deterioration will be greatly prevented.

19. Ganja is only smoked. I have no experience about charas.

20. Ganja is smoked generally by the lower classes of people. About half of their number smoke ganja. About six annas of the middle classes and about two annas of the upper classes smoke the drug.

21. Flat ganja is preferred.

22. No experience.

23. No.

24. Bhang is generally taken by up-country men. Very few of the men of this district eat bhang for intoxication, but some take it for its medicinal purposes.

25. The use of ganja is on the decrease. The increase in the price of it is the cause of the decrease in its consumption. I cannot give any definite information under this head about bhang and charas.

26 and 27. Cannot answer this question definitely.

28. *Ganja.*—(a) Two anis, whose price varies from 3 pice to 4 pice.

(b) One tola, whose price varies from 3 annas to 4 annas.

No experience about bhang and charas.

29. A leaf of tobacco is ordinarily mixed with ganja. I do not know of any practice of mixing

dhatura with ganja. The leaf of tobacco increases the flavour of ganja.

30. In most cases ganja is consumed in company. Bhang is generally consumed in solitude. No experience about charas.

31. The habit of consuming ganja is not easily formed. It is difficult to break off the habit when once formed. There is no tendency for the moderate habit to develop into the excessive.

32. There is a custom of consuming ganja on the occasions of Trinath's Puja. Three chillums of ganja are essentially necessary on such occasions. The use of ganja on such occasions is essential, and is generally excessive. The use on such occasions is likely to lead to the formation of habit.

Bhang is not required for any such purpose.

33. The consumption of ganja is generally held in contempt. The reason for such a feeling is that the indulgence in the drug tells upon the constitution.

There is no custom of worshipping the ganja or bhang plant.

34. It would be a serious privation to all classes of consumers to forego the use of ganja. This will produce all sorts of bowel complaints in the consumers. Bhang is generally consumed for medicinal purposes. If the consumption of the drug be prohibited, this will also be the cause of great hardship.

35. It would be feasible to prohibit the use of ganja and bhang. If all supply be stopped, there would be no illicit consumption. There will be great discontent amongst the consumers, but such discontent would not amount to political danger. The prohibition would be followed by indulgence in opium.

36. No.

37. No experience.

38. Flat ganja produces more intoxication than the other varieties.

39. No experience.

40. Ganja and bhang are both prescribed by native kavirajes. Bhang is required for the treatment of cattle diseases.

41. Ganja—

- (a) is digestive;
- (b) gives staying-power;
- (c) has no beneficial effects as a febrifuge;
- (d) nil.

Bhang—

- (a) is digestive;
- (b) nil;
- (c) nil;
- (d) cures bowel complaints.

42. *Vide* answer to question 41.

43. Inoffensive.

44. Ganja.—A slight intoxication is produced immediately. Ganja is refreshing. I cannot say if it allays hunger. It creates appetite. The

effect lasts for about an hour. There are no after-effects.

Bhang.—Takes a little time to produce intoxication. It creates appetite. The effect lasts for about 12 hours.

45. Ganja does not impair the constitution in any way. It does not injure the digestion. It produces cough. In some it produces laziness; but it does not induce habits of debauchery, nor does it deaden the intellect or produce insanity.

Bhang has no injurious effects.

46. Excessive consumers of ganja get a dried-up appearance. They also get dysentery in the end. Excessive consumption does not deaden the intellect or produce insanity. I am not aware of the effects of excessive consumption of bhang.

47 and 48. Not hereditary.

49 and 50. No experience.

51. Only a small proportion of bad characters are habitual moderate consumers. There is no connection of the moderate use with crime.

52. Similar answers as to question 51.

53 and 54. No.

55. No. Complete stupefaction can be induced by bhang.

56. The admixture of tobacco with ganja improves its flavour. I have no information about dhatura being mixed with ganja or bhang.

57. No experience.

58. Is on the whole working well.

59. I cannot suggest any improvement.

60 and 61. No experience.

62. I think the cultivation of the bhang plant should not be controlled.

63. No objection.

64. The system of levying duty on the deficit that occurs in transit is not equitable. Such duty is levied, although the seals of the bags are intact and there is no suspicion of tampering in the way. In the same manner any excess in weight due to absorption of moisture is also brought into account. This also is a cause of hardship.

Duty is also levied on all deficiency in excess of 2½ per cent. found at the time of annual stock-taking. In most cases this is due to natural causes, and the goladars should not be made responsible for it.

65. The taxation of ganja is heavier in comparison with bhang and country liquor.

66. There should be different rates, as they contain different proportions of branches in them.

67. No objection.

68. Ganja is consumed in the shop very rarely. Such shops do not cause any disturbance to people living in the neighbourhood.

69. Yes; such enquiries are made by excise sub-inspectors. Local public opinion ought to be consulted.

70. No information.

244. Evidence of BABU RAM NIDHI SHAHA, Excise Vendor, Mymensingh.

1. I have been selling excisable articles for a period of about 40 years.

2. The definitions may be accepted. Ganja and

bhang are also known by the name siddhi. The stem is so used by sanyasis. Charas has got no other name.

3. Bhang plant grows wild in Mymensingh, Burdwan, and Nadia. It grows in abundance in Mymensingh.

4. It is known by the names bhang and siddhi.

5. It generally grows on fallow lands which are rather high.

6. Dense.

7. (a) In Rajshahi district.

(b) In Rajshahi district.

(c) No.

(d) No.

I am not aware of the extent of cultivation.

14. (a) Produced at Rajshahi, but to what extent I am not aware of.

(b) Produced at Rajshahi, but to what extent I am not aware of.

(c) Bhang is prepared from the wild plant in all districts.

18. I have no experience about charas. Bhang and ganja both deteriorate by keeping. They lose their effect entirely by time. Ganja keeps good for a year with ordinary care. I have no knowledge about bhang on this point. The resinous substance dries up. A sort of worm also grows in the drug. These are the causes of deterioration. I am not aware how the deterioration can be prevented.

19. Used only for smoking.

20. Ganja is generally smoked by the lower classes of people, and occasionally by people of the middle classes. I cannot say what proportion of these people smoke ganja. I have no experience about charas.

21. Flat ganja is preferred.

25. The use of ganja is on the increase. The reason for this is the increase in the price of country liquor. Many people who formerly indulged in liquor have now betaken themselves to ganja.

28. (a) Half ani, worth two pice.

(b) Six anis, worth four pice.

29. Tobacco is ordinarily mixed with ganja. I am not aware if dbatura is ever mixed with it. I have no information as to what ingredients are mixed with bhang.

30. Ganja is ordinarily consumed in solitude. The prostitutes are the only females who consume ganja. Ganja is not ordinarily consumed by children.

No information about bhang and charas.

31. The habit of consuming ganja is not easily formed, but when once formed it is difficult to break it off. There is a tendency for the moderate habit to develop into the excessive.

32. The ganja consumers sometimes offer the drug to Mahadeo or Trinath. The drug is not essential for such purposes; the consumption is temperate. It does not lead to the formation of any habit.

33. The consumption of the drug is held in contempt. This feeling is due to an apprehension that their example might be followed by others. I am not aware of any custom of worshipping ganja or bhang plant.

34. It would be a serious privation to the labourers who indulge in the drug. The drug enables them to bear fatigue. I can give no idea of the number of this class.

35. It would be feasible to prohibit the use of the ganja. The drug will not be consumed illicitly

when the supply will be entirely stopped. It will occasion serious discontent among the consumers; but such discontent will not amount to political danger. I cannot say if the prohibition will be followed by recourse to alcoholic stimulants or other drugs.

36. No.

37. The intoxication produced by charas is of greater intensity than that produced by ganja.

38. No difference.

40. Bhang is prescribed for bowel complaints.

41. Ganja—

Bhang—

(a) Digestive.

(a) Digestive.

(b) Gives staying-power.

(b) Nil.

(c) Nil.

(c) Nil.

(d) Nil.

(d) Nil.

42. Moderate use is harmless.

43. Inoffensive.

44. Ganja.—The effect is refreshing. It produces slight intoxication, does not allay hunger, but rather increases the appetite. I have no experience on the other points.

No information about bhang and charas.

45. Ganja—

(b), (c), (d) and (e) No.

(f) Does not produce insanity. I cannot say if it deadens the intellect.

46. Excessive use of ganja produces dysentery and asthma.

47 and 48. No.

49 and 50. I am not aware if it is used as aphrodisiac.

51. Only a small proportion are ganja consumers. There is no connection of the consumption of ganja with crime.

52. Only a small proportion are ganja consumers. There is no connection of the consumption of ganja with crime.

53. No.

54. No.

56. The effect of mixing tobacco with ganja is to increase the flavour. No information about the admixture of dhatura.

58. Working fairly well; but it is still capable of some improvement.

59. *Vide* answer to question No. 63.

62. I think the cultivation ought to be controlled, as this interferes with the consumption of duty-paid bhang.

63. Under the present system of wholesale vend of ganja, the retail vendors do not get their supplies just when they require it, as ganja is issued by officers who have to go out on tour. It would be more convenient if the goladars were permitted to pay the duty on the entire quantity imported, and to issue ganja themselves just as is done from a wholesale imported liquor shop.

64. No objection.

65. The taxation of ganja is very heavy in comparison with bhang. The duty on ganja should be reduced.

66. There should be different rates, as they contain different proportions of branches in them.

67. No objection.

68. Very rarely consumed on the houses, so that no disturbance is caused to consumers.

69. Wishes of the people are consulted through the Excise Officers.

70. I am not aware of any such smuggling.

245. Evidence of BABU PROSAD DASS DUTT, Zamindar, Calcutta.

20. The mendicants of Upper India, which include jogis, sanyasis, and sadhus as a special class, generally use ganja in excess when in a large party and can afford to pay for the same. The other class, which includes the mendicants of Lower Bengal, and generally the lower class of people of India who have to undergo hard and arduous work and expose themselves to the weather, use it in moderation. Of course there are exceptions to this general rule.

24. The people of Northern India generally consume bhang habitually more or less. The people of Lower Bengal generally do not use it habitually like the people of Upper India.

20. Charas is not a favourite to any class; it is used by a small section, and is not largely used.

33. Few men of the middle or upper class of India use ganja, and very few men of those classes of Lower Bengal are addicted to it. The word "ganja-khor" i.e., the smoker of the drug, has been and is still considered as an abusive term. There is another saying, "*Ganja khele Lakhi chare*," which means goddess of wealth quits him who smokes ganja. In fact the respectable class always try that no member of his family should indulge in ganja. Nevertheless, hitherto some young people of this class who had prejudice to wine used to indulge in it sometimes secretly amongst their party; but now such smoking is considered as degradation, and wine has taken its place.

41. The object of the moderate use of bhang is said to be to keep the digestive functions steady and to enjoy a little pleasure. The object of the moderate use of ganja is said to be to prepare the smoker to perform hard work and to undergo exposure. Certainly the smoking, it is said, gives also a little pleasure to drown the contemplation of the hard lot which the poorer classes consider their doom to undergo.

28. Five to six chillums of ganja per day is considered as a moderate consumption. It costs about three pice; but the quantity suffices to satisfy the cravings for smoking of about three men. Half to one lota of siddhi or bhang may be considered as moderate consumption for a man. It is worth about one pice.

31. It is a general rule that the moderate use of every intoxicating drug may develop into excess unless it is restrained by true self-love or want. Ganja and bhang cannot be an exception to this general rule.

32. On the occasion of the immersion of the idols into the water, i.e., on Vasan day, after keeping up the previous night, and exposure, bhang is generally used by almost all the people of India, and it is also given to the deities as an offering. The better class of people, as a general rule with a higher education, sip it only; but the Anglicized natives do not conform to this rule. The people of the North-Western Provinces, more specially of Mathura, take bhang before a sumptuous repast.

41. For a layman it is indeed difficult to say the effect of moderate or excessive use of the

drugs. Even a professional medical man cannot answer this question without much observation. So far I have seen that men using ganja either moderately or excessively performed their allotted work easily. I limit the excessive use to the extent which mendicants of the North-Western Provinces in party generally use, say, up to 20 chillums per day. I have heard from two Bengali Brahmins, who are now dead, that they smoked ganja up to 50 to 60 chillums, but that did not incapacitate them from doing their ordinary work. Possibly some men may possess strong constitutions to bear such excess. One of them gave it up altogether, and lived long without suffering at all. I have seen excessive use of bhang make men so intoxicated as to be worthless to perform their daily avocations. Of course this is confined to those who are not addicted to it.

I am one of those who would like total stoppage of all intoxicating drugs, if practicable, without any injury; but I must candidly admit that the moderate use of ganja by those classes who have to carry *palki* at a distance on a rainy night, or over a steep hill, or to navigate about over dangerous waters or during the night, or when rain is falling and wind is blowing fearfully, or when a cultivator in the field working in knee-deep water and soft earth during biting rain, is not objectionable, as I have personally seen under these circumstances the labourers after the use of a chillum or two grew invigorated and resumed their work with a desirable heartiness.

29. I am not prepared to answer this question. I have only heard that dhatura seeds are taken unintentionally. Possibly the sellers mix them to produce a more intoxicating effect when they consider regular bhang is below the standard quality.

35. Possibly it would be some benefit to some of the people from my point of view, that moderate use may tend to excess, if the use of hemp drug can be prohibited. Excessive use by some, in whose constitution it is not agreeable, I am afraid, leads to madness and increases a propensity to do vice and crime, not excepting murder; but how far it is expedient or feasible to suppress the use of the drugs I am not prepared to say, as so many people are using them for a long time without doing serious harm. It is a serious question whether it is wise to suppress a thing with the expectation of doing good to some, whilst it may do serious harm to a large class of people who have to perform hard work and undergo great exposure. It is an admitted fact that without some stimulant an exhausted man cannot resume hard work. It is impossible, as a practical man I say, to prohibit ganja altogether. We all know that generally some members of a family or some friends try to dissuade their member or friends who are addicted to them from using intoxicating drugs, but they invariably fail to achieve their object. If it be urged that prohibitory duty may stop consumption, I doubt that very much, and believe that the people who are addicted to them will naturally reduce their other necessary expenditure to the detriment of the family, but will

continue to use the drugs. Furthermore, the smokers will betake themselves to crime to raise money to satisfy their intoxicating propensity. Considering the matter from all points of view, I would leave it as a necessary evil beyond control.

58. I am not exactly aware of the system of excise arrangement with reference to this subject. So far I may say, I have travelled much in the interior, and have never heard in any place that the excise arrangement is in any way inadequate to meet the requirements against abuse. Certainly I would not allow excise arrangements to be curtailed.

55. I have an estate in Saugor Island, where I generally reside five to six months continually. I look upon the people as my children, and they in return entertain kind regards for me. Some men-

dicants have taught most of my people to smoke ganja. I have tried my utmost to suppress it, but I am sorry to say I have failed. This led me to think that it would be useless to make an attempt to prohibit the use of the drugs. As an economic question, I may point out that this is a cheap intoxicating drug acceptable to the poor class of people, and it is a grave question whether its restriction may not lead the people to resort to expensive intoxicating substances.

It should be borne in mind that India is a poor country, and the major portion of the people cannot afford to expend much. It is all very well to advise people what they ought to do; but to make them conform to such advice is a different matter. A horse may be taken to the water; but to make him drink against his wish is impossible.

246. Evidence of BABU MAHENDRA NATH ROY, of Santa, Jessore.

1. The information that I have gathered from the numerous ganja-smoking persons in this part of the country authorize to answer the questions framed by the Commission.

2. As regards Dr. Prain's report, is quite correct, and in our part of the country people corroborate his assertions.

3. Ganja is indigenous in every part of Hindustan, but where taken care of and being cultivated, ganja is produced.

4. There are no different names of ganja in this part of the country that I know of.

5. Ganja grows in the mountainous regions as well as in the swampy plains and on the sandy and alluvial soil, and remains throughout the year.

6. The growth of the wild hemp is ordinarily dense or scattered.

7. There is no cultivation of hemp in our part of the country, neither do the people produce hemp, bhang and charas, or take out fibre or seed.

8. As there is no cultivation of ganja, so there is no increase or decrease of the area.

9. I do not know the method of cultivation.

18. Yes; it deteriorates after long keeping. It remains well for a year. It is generally worm-eaten. It can keep well if it be kept in a dry place.

19. Ganja and charas are generally used for smoking, and there may be other preparations, but they are not prevalent in this part of the country.

20. It is generally the lower classes of the community that use ganja and charas.

21. The round class is generally preferred by the public.

22. Foreign charas is generally used, and is imported from Nepal and Punjab.

23. Bhang is never used for smoking.

24. All classes of the community drink bhang, not generally in Bengal, but in the North-Western Provinces, where its general use is prevalent. It is also mixed with sweetmeats, and is called majun, and is used by the people of the North-Western Provinces.

25. The use of charas, bhang, and ganja is on the decrease on account of the importation of foreign wine and of its heavy tax.

27. It is the lowest class who generally begets the habit of smoking, such as the palki-bearers, carpenters, and common labourers who, after the day's labour, take it for refreshment.

29. Bhang massalas are known to be cucumber seed, rosebuds, aniseed and round black pepper, with the admixture of milk, rosewater, attar and sometimes dhatura seeds to make it more effective.

30. Ganja and charas are generally smoked in company, and bhang is almost used in solitude and sometimes in company during festivals, such as Bijoya Dasami day.

31. The habit of these drugs is always acquired from company. It is not at all difficult to break off. The tendency of these drugs develops into excess.

32. Bhang and ganja are generally used by the Hindus, from time immemorial, for it is regarded sacred since their god Siva used them, and it is essentially necessary to some of the religious sects. The moderate use of these drugs is not injurious.

33. Bhang is generally worshipped by Hindus in general, and it is not looked down by the public as with alcohol drinkers, and it is not generally in disrepute.

34. Yes, it is with the mendicants, fakirs, nagas and sanyasis to forego the use of bhang and ganja.

35. It is not feasible to prohibit the consumption of these drugs, since it will create serious discontentment throughout the country, and no substitute will have recourse to alcoholic stimulants or other drugs.

36. Yes; alcohol has, in certain extent, substituted for these drugs, specially to the higher English-knowing middle classes, simply to imitate English habits.

37. Ganja is more strong than charas.

40. It is used for medicinal purposes by kabirajes, allopaths, and homeopaths, adapted to diseases of drunkards of a neurotic character and to the urinary diseases. The characteristic of the intoxication it produces seems to be exaggeration of all perceptions and conceptions (aphrodisiac) and tendency to catalepsy. It is one of the great remedies to gonorrhœa, and also to cattle-diseases.

41. Yes, it is stomachic. It is preventive of exposure and fatigue.

42. Moderate use of these drugs is always beneficial.

43. Moderate consumers are always inoffensive.

44. The immediate effect of the moderate use is refreshing; slight intoxication is produced, hunger, and creates appetite. The effect lasts for three or four hours. No after-effects; neither it produces longing nor uneasiness.

45. Habitual moderate use of these drugs never produces any untoward symptoms but on the contrary the excessive use produces all the symptoms enumerated in the question.

46. The excessive use of these drugs tends to bowel complaints.

247. Evidence of the DISTRICT BOARD, 24-Parganas (Sub-Committee).

1. The answers are framed after discussion at a meeting of the Sub-Committee nominated by the District Board, 24-Parganas.

2. The definitions of the drugs as given by Dr. Prain may, on the whole, be accepted as correct.

Bhang, siddhi, subji, or patti consists of the leaves and seeded flowers of varieties of *Cannabis sativa* supposed to be indigenous.

Flat ganja is locally known as *chaptā*,
Round " " " " *gol*,
Broken " " " " *rora* or *chur*,
i.e., by *chaptā*, *gol*, *rora* or *chur*, respectively.

3. The hemp plant grows all over India spontaneously. Confining our remarks to this province, ganja has been grown under license in a compact tract of country within a radius of 16 miles lying in three districts, viz, Rajshahi, Dinajpur, and Bogra. In the Bengal districts of Shahabad, Champaran, Monghyr, Bhagalpur, Dacca, Rangpore, Darbhanga, Chota Ngapur, and Orissa the hemp plant grows.

4. Shan, pat, naltapata, kashmiri, subji and patti.

They do not exactly refer to the same plant but to varieties of it.

5. The plant flourishes in the alluvial plains of Lower Bengal.

6. Ordinarily dense.

7. Yes, see answers to question 3.

Charas is produced in the North-Western Provinces and not in this province.

This has already been answered in questions 3 and 4.

8. The cultivation of ganja in the area lying in Dinajpur, Bogra, and Rajshahi for the last five years has been fluctuating, as the figures below go to show:—

	Bighas.	Cottahs.
1887-88	1,780	3
1888-89	2,433	4
1889-90	2,408	1
1890-91	2,669	18
1891-92	1,315	15

Paragraph 48 of Babu Hem Chandra Kar's report is in point.

9. See paragraph 48 of the above report.

10. Anybody, whether Hindu or Muhammadan, can cultivate hemp. It is grown by the ordinary agricultural cultivators.

11. No.

12. None.

13. With the exception of the places mentioned above, the cultivation is prohibited in this province.

Hemp is said not to grow in such districts as Bankura and Birbhoom, where the soil is stiff and the climate dry.

14. See answers to questions 3 and 7.

15. The following preparations are known:—

(a) From cultivated plant (A) for smoking. Ganja is the preparation obtained from the flowers of the ganja plant by cutting them into small pieces and mixing them with dried tobacco leaves. Bhang is largely used as an intoxicating liquor by washing the leaves and pounding them into a fine paste with an admixture of sugar, spices, etc., with water. (b) From the wild plant no preparation is made in Bengal.

A powerful sun is indispensably necessary for the proper preparation of ganja both flat and round. The chur is the result followed in the preparation of the other two forms of the drug.

16. (a) Yes, to a very moderate extent.

(b) Yes.

(c) No.

17. By all classes. Charas, however, is not prepared in this country.

18. Yes, they lose their narcotic properties in two years time, but the medical properties of siddhi are believed to increase. The causes of deterioration are exposure to atmospheric moisture, dampness, etc. The preventive measures are constant cleansing, drying in the sun, and keeping in stoppered bottle.

19. Yes, ganja is used as medicine in many diseases. The action of the drug in the form of a tincture or extract is to sharpen the appetite, and it produces sleep in cases of delirium tremens, where even morphia has failed as a hypnotic, and it has been used with success in cases of tetanus and neuralgia. It is also used as a prophylactic against diseases apt to be contracted in malarious localities. The worshippers of Siva use ganja as an offering to their god.

20. Ganja is chiefly smoked by those classes whose vocations expose them to the inclemencies of the weather, e.g., fishermen, sea-faring men along the coast, artizans, syces, coachmen, darwans, palki-bearers as well as mendicants, generally with good effect. As a rule, it is not smoked by the agricultural and the well-to-do classes in Bengal. In the Behar districts more bhang than ganja is in use. The consumers of ganja are chiefly recruited from among the Hindustanis of all classes. Charas, on the other hand, finds favour among the well-to-do classes of Bengal.

21. Regular smokers give preference to flat and round ganja.

22. Charas is obtained from Mirzapur, Amritsar,

Nepal, and Kashmir. The Mirzapur and Amritsar charas are chiefly used. It is imported from the North-Western Provinces.

23. Yes, but rarely, and principally by the natives of the North-Western Provinces.

24. Men from Hindustan proper living in Bengal are, as a rule, addicted to the use of bhang in various forms. During the hot months 8 per cent. of the inhabitants of the North-Western Provinces consume bhang. In Bengal, people suffering from dyspepsia take it to obtain relief and as an appetiser. It is occasionally used by Bengali gentlemen. It is sometimes used as a substitute for intoxicants.

25. Owing to the high price of country liquor the use of ganja is on the increase in Bengal. As regards charas, there was a further increase of 3 maunds 24 seers 5 chittacks in consumption last year, which may be attributed to increased immigration from the Upper Provinces. The increase in Murshidabad is explained to be the result of the substitution of charas for ganja, owing to the high retail price of the latter. Bhang is also on the increase as a cheap, less harmful substitute for other powerful stimulants.

26. (a) The proportion is 100 to 1 of excessive consumers.

(b) Almost the same proportion as indicated above.

27. The answer has been dealt with under 17 and 25.

28. Ganja about 40 grains per diem, take 20 or 30 grains a day.

Take 4 oz.

Bhang in the case of moderate consumers is about one quarter, and in the case of excessive consumer it raises to four tolas.

29. Charas (a) ordinarily mixed with paste tobacco, and (b) exceptionally with tobacco and molasses, while ganja is mixed ordinarily with dried tobacco and exceptionally with rose leaves. Siddhi is ordinarily pounded to a fine paste diluted with water and sugar. Dried rose leaves, pounded black pepper, rosewater, aniseed, milk are also added to give flavour to the beverage. The above are the ingredients of bhang massala. Dhatura, cucumber seeds, and kuchla are seldom used. These admixtures increase the power of intoxication, and act as poison.

30. Generally in company. Principally—nay, exclusively—confined to male sex (adult).

No, it is not usual for children to consume.

31. (a) No.

(b) Yes.

(c) Yes.

32. On the last day of the Durga Puja bhang is used in every Hindu family as a part of religious observance, and then it is used very moderately. It is also used as an offering to Siva. It is also used for the purpose of amulet to ward off evil when starting on journey.

Temperate.

No, not likely to lead to the formation of the habit.

33. Looked down upon with contempt. Public opinion is decidedly against the consumption.

To moral reprobation. No custom of worshipping the plant that I am aware of.

34. Yes, most decidedly. The habitual consumers of ganja and charas will not be able to

stand the fatigue, exposure, etc., which they have to undergo without the smoke. They will have recourse to still more injurious drugs. Bhang again could not be given up by the habitual consumers without aggravating the complaints, to prevent which it was resorted to.

35. The prohibition would hardly be feasible. If repressive measures be adopted, the habitual consumers will probably have recourse to substances far more deleterious in their effects than hemp drugs and will resort to illicit consumption. The prohibition would cause discontent among the fanatics, fakirs, and sanyasis, but that need not lead to a political danger.

Yes, recourse could be had to other stimulants.

36. None.

37. The effect of charas-smoking is instantaneous, but it does not last long, while the effect of ganja-smoking is very much greater, and even a habitual smoker remains intoxicated for several hours. Charas is frequently taken to increase the effect of ganja. The former induces giddiness and headache, the latter brings on cough and other throat and lung diseases. The former is odourless, while the latter has a disgusting odour at the time of smoking.

As regards these, the common popular saying is:—

Siddhi produces wisdom.

Ganja spoils kingdom.

Charas creates headache.

38. Yes. The effects of broken ganja are rather serious in narcotic properties, being generally mixed up with various deleterious substances and the fastidious ganja-smokers reject it as unfit for use. Round is stronger than flat ganja.

39. Smoking is more injurious than drinking. In drinking, much of the deleterious matter is washed away. Ganja is more easy of adulteration.

Eating the extract of siddhi known as majun or majun is more injurious. Ganja and charas are never drunk. Siddhi, however, is chiefly drunk. The smoking of ganja and charas is more harmful in its effect than siddhi-drinking.

40. Yes.

41. Yes, to persons accustomed to it.

(a), (b), (c). Yes.

See answer to question 20.

42. Yes, in many cases. See answer to question 20.

43. Yes.

44. See answer to question 37.

(a) The immediate effect is said to be pleasant sensation of intoxication.

(b) Yes.

(d) and (e) Yes, both.

(f) The intoxication from siddhi continues for 14 or 16 hours.

(h) Yes.

45. (a) No. In some cases it produces noxious effects.

(b) In few cases it does.

(c) No.

(d) Yes, if taken intemperately.

(e) Intoxicants generally impair the moral sense, and these drugs form no exception to the rule. They induce laziness.

(f) Excessive continued use deadens the intellect. Insanity is met with among the consumers of the drugs, but the question whether it is due to the intemperate use of the pure drugs or to predisposition has not been authoritatively stated. The insanity is of a temporary character and is confined chiefly to boys and youths of an excitable nature. The likelihood of the occurrence of insanity in moderate consumers of the drug is according to the duration of the practice. The adulteration of the drugs with poisonous ingredients is said not unfrequently to induce insanity, in which case the malady will probably not recur provided the pure drug be used. It is, however, advisable not to resume the practice at all.

46. Habitual excessive indulgence leads to the various evils enumerated in the above question. Its immediate effect, if temperately taken, is to produce the curious mental frenzy which causes Orientals to run "amok."

47. No.

49. (a) Yes.

(b) No, but to keep up at night they do use charas.

(c) No.

50. The excessive use of the drugs like all excesses relaxes one's nerves and renders the consumer useless.

51. No. The connection between crime in general or with crime of any special character is very slight indeed, if it exist at all.

52. Men bent upon the perpetration of violent crimes are known to have recourse to excessive doses of the drugs.

53. Opinions are divided; however, consensus of opinion leans to the hypothesis that immoderate indulgence leads in its remote effects to laziness and generally want of energy—a condition most unfavourable to criminal tendencies. Yes, the Sub-Committee have been informed of a case in which a boy of perverted nature attempted a murderous assault on his parents, wife and other near relatives.

54. See the foregoing answers.

55. Sometimes they do.

Yes, but rarely.

56. The effects are intensified. The Sub-Committee possesses no information.

58. The Sub-Committee of the District Board has not attempted to answer the questions in this chapter.

248. Evidence of the DISTRICT BOARD, Patna.

1. We had no special opportunity to acquire any special knowledge regarding matters connected with hemp drugs. The informations have been collected from local sources.

2. The definitions, as far as our information goes, are correct. They are known by the name of bhang, charas, and ganja.

3. The spontaneous growth is said to be abundant in Tirhut and North Monghyr. In the district of Patna the growth is not such. It may, however, be found here and there; but it is doubtful whether they are spontaneous. Where it is spontaneous, the dry leaves are used as bhang.

4. They do not bear separate names.

5. In damp and moist climates the growth of wild hemp is said to be spontaneous.

6. Scattered.

7. We know of none in this district.

8, 9, 10, 11 and 12. Nothing is known to us.

13. Reply given under 14, Chapter III.

14. We have no personal knowledge. From information collected we have come to know that the ganja is produced in the districts of Naogaon, Rajshahi, Dinajpur and Bogra.

Charas produced nowhere.

Bhang produced in Tirhut and North Monghyr.

15. Nothing is known to us.

16. Bhang is generally prepared in the houses of those who take it.

Besides that, when there is any gathering of those who take it, it is prepared either on the bank of the river, stream or tanks, or in any open place.

It can be prepared from the hemp plant wherever grown.

May be; but we have no information about it.

17. We have no experience of its manufacture.

18. According to our information, they do deteriorate by long keeping. Probably so.

With ordinary care they may be kept in good condition for about two years. Damp and exposure are the causes of deterioration. To prevent deterioration, they should be kept in dry place and well secured from damp.

Nothing is known of charas.

19. Yes; ganja is used for medicinal purposes.

In it it is mixed with camphor and cocoanut oil. Mixing does not mean powdered, but when oil is placed on fire, ganja leaves are put into it, and when the oil is ready for use, it is thrown away.

Those who indulge in ganja prescribe its use in cold.

This is prevalent both in Bengal and Behar.

Charas is never used in any other purposes besides smoking.

20. All classes of people smoke ganja and charas and we could scarcely select out any who do not.

Its use is mainly restricted to the lower order of Hindus and Muhammadans. From this it is not to be inferred that the higher class of people reject it altogether. But, as far as our information goes, amongst the higher class it is used to a very limited extent.

The other class with whom the ganja is a favourite smoke is the Hindu sanyasis (mendicants).

All ganja-smokers may take charas, with the exception of sanyasis.

People who live in damp climate and who are exposed to inclement weather use ganja moderately.

21. Flat (chipta) ganja is preferred. No other kind is used.

22. The charas is not procurable at the licensed shops. The Moguls who come from the North-Western Provinces, and from other places in the North-Western Provinces where the use of charas is extensive, bring charas with them, and it is they who supply people with charas. There are people in the city who smoke charas; but the source from which they are supplied can hardly be ascertained.

23. Bhang is never used for smoking.

24. Bhang is drunk by all classes of Hindus. It is a favourite drink with the Chowbeys, amongst Brahmins, Rajputs, Pavans, and Marwaris. Amongst this class we estimate no less than 50 per cent. who are habitual drinkers. The use of bhang is very great amongst these classes in cities and towns. In mufassal villages it is, however, not so; but it is said that wild growth of hemp in such localities is utilized by the villagers.

25. The liquor ordinarily used by the lower classes being cheaper, it has, to a certain extent, decreased the use of these drugs amongst them.

26. Taking population addicted to these drugs as 100, we give the following proportion:—

(a)	.	.	.	20	60
(b)	.	.	.	10	30
(c)	.	.	.	3	6
(d)	.	.	.	2	4

27. The percentage under head (a) includes all grades of people, from the richest to the poorest, including sanyasis.

Under head (b), the spoilt scions of a rich family and the dregs of society.

Under head (c) as in (a).

Under head (d) as in (b).

We can give no special reason which mainly leads to the practice. We may, however, ascribe the following causes:—

(a) Rich men leading a sedentary life and having nothing to attend to imbibe the practice for pleasure only, and it is they who take unusual pains in making the drug pleasant to drink or smoke.

(b) Middle class use it not so much for pleasure as to shake off worry, it having a stimulant effect.

(c) The day labourer and lower orders of people find a relief after a whole day's manual labour.

(d) People living in damp places, or where cold is excessive, take it for health.

(e) Sanyasis who lead an itinerant life and subject themselves to different climates and exposure, find it a very pleasant drug to alleviate the effects of such a nomadic life.

28. To habitual moderate consumers, from 1 to 2 annas per diem.

To habitual excessive consumers, from annas 4 to 8 per diem.

29. In bhang the following ingredients are used:—

Ordinary.—

Golmirich (black pepper), kasni (endive), soumf (aniseed).

Thandai.—To bring cool effect—

Golmirich (black pepper), kasni (endive), soumf (aniseed), khira-ki-bija (cucumber seed), barchickar, jatadhari-ki-biya, bara elaichi (cardamom), gulab-ki-patti (rose leaves).

Garam.—To have intoxicating effect—

Golmirich (black pepper), musk, kesar (saffron), sugar or sugarcandy, curd or milk or malai (milk cream), basaundhi (a preparation of milk with sweet fruits), banslochan (manna of bamboos).

Panchratan bhang.—Otherwise punch, to have a very intoxicating effect—

Golmirich (black pepper), kuchla (*nux vomica*), opium (a very small dose), sankhia-ki-lakir (one stroke of it on the bowl in which it is prepared), dhatura.

To ganja, the following ingredients are used:—

Ordinary tobacco leaves.

Exceptionally for increased intoxicating effect and to make the drug cooler as well:—Benars khamir, a preparation of tobacco, chewed with betel; itter, otto rose leaves. It is also soaked in rosewater for three or four days before use.

No ingredients for charas, but it is sometimes mixed with ganja. When mixed, it is called *grapeshot*, which means the effect it produces on the consumer.

30. The moderate consumers usually take these drugs either in solitude or in selected company. The others use it without any privacy whatever. As a rule, these are used in company. It is not confined to sex. Females use bhang, but number must be considerably less. Ganja is seldom used by females. There is no restriction of age. It is usually taken at the age of 15, and in exceptional cases at a lower age. Children seldom use any of these drugs.

31. Yes; easily formed, and, when formed, it is difficult to break off. These drugs have a tendency to develop from moderate to excessive. The spoilt members of a rich family bring it to excessive, and so the lower order of people whenever they could afford and have any prejudice to drinking.

32. *Holi.*—Those who never indulge in it take it on this occasion excessively.

Sivratri.—On this occasion it is considered essential to take excessively.

Basant Panchami.—Temperate.

Janamastami.—Temperate.

Bijaya Dasami in Bengal.—Temperate.

Is of course injurious if taken excessively.

It does not necessarily lead to the formation of a habit by those who take it on the first two and the last occasions.

33. The consumption of bhang is not so much looked down in this society as in the case of ganja and charas. Those who take ganja or charas have the bad reputation of being called liars and therefore seldom believed. Use of narcotics in any form is of course looked down, and it is due to its bad effect on the consumers.

There is no custom of worshipping hemp plant known in this part of the country.

34. It would of course tell hardly on the sanyasis if they are made to forego. In case of others it might not be so. But those who are addicted to any of these drugs might take themselves to drinking, which may have a more pernicious effect on the consumers. Those who are prohibited by religion to take alcohol might resort to illicit manufacture of these drugs. We cannot furnish any number, but may barely state

that it would affect the Chowbeys as a whole, Rajputs and Pavans.

35. Please see above. Prohibition cannot, we think, be totally enforced. It would in all probability create discontent amongst the sanyasis, who live upon it.

We do not think there would be any political danger.

(a) Yes.

(b) Yes.

36. We cannot, of course, furnish any statistics; but our impression is that, notwithstanding the permission to grow and use the drugs, the use of alcohol is on its increase. A common consumer would require at least one anna for ganja; but for the same price a larger quantity of alcohol can be had, and that would be much more intoxicating. Its prohibition would affect, as stated above, the sanyasis and those who cannot use alcohol, and this proportion is much less than those who may indulge in any other drug or alcohol.

37. We are not in a position to answer this.

38. We are not in a position to answer this. Flat ganja is preferred, and it is said that it is the best of its kind.

39. Smoking of ganja is less injurious than eating or drinking the same. But it is seldom eaten and drunk. We can give no particular reason for it, but such is the impression.

40. We are not in a position to give any reply to this question. Bhang is prescribed by the native school of doctors for indigestion. In cattle diseases bhang is also used.

41. (a) The result is temporary. Its after-effect is bad and brings on indigestion.

(b) Yes; and for this reason it is recommended amongst day labourers and sanyasis.

(c) In damp climate the people usually resort to it; but we are not sure of its efficacy.

(d) We know not. We mean moderate use amongst the lower class and sanyasis.

42. We do not consider its use either beneficial or harmless. Besides sanyasis, its use amongst others is, we think, injurious.

43. Yes.

44. It is said that the immediate effect of ganja is instantaneous intoxication. The smokers describe that it creates an agreeable and refreshing sensation, and it lasts for an hour or so. The intoxicating effect of bhang commences in about half an hour and lasts, both according to the ingredients used and the temperament of the consumer, from four to six hours. The effect of charas is much the same as that of ganja, only in a milder degree if taken alone; but, if mixed with ganja, is more than the effect of ganja pure and simple.

It does create appetite in the beginning; but in the long run it fails.

The want of subsequent gratification produces

longing to habitual consumers of ganja; but not to that extent in bhang drinkers.

45. Moderate use. It does not produce any noxious effect, physical, mental, or moral.

Those who are well fed do not suffer; but the poor do suffer in constitution.

No loss of appetite is perceptible amongst moderate consumers.

Moderate consumers scarcely suffer from these diseases.

Moderate consumers are not found to suffer physically or undergo moral degradation.

It does not bring on insanity.

46. By excessive use it does produce physical deterioration. It does injury to digestion. Sometimes it causes dysentery, bronchitis, and asthma. Though moral sense does not leave the consumer, its excessive use is likely to impair it. Cases of insanity do occur, but very rare.

47. It is not hereditary, but the association is likely to affect the children.

48. In case of an excessive consumer the effect may be the same in a greater degree.

49 and 50. Yes; by low class of prostitutes. Yes; it is. The popular belief is that in the long run those who use it as an aphrodisiac and carry it to excess suffer from impotency.

51. Yes; it has connection with crime and committal of petty thefts.

52. Yes; it has connection with crime, and when under excitement, and there is a premeditation, they commit heinous offences. It would thus be seen that the offence is not the direct effect of ganja.

53. No. We know of no case.

54. Yes.

55. Yes; but not without admixture of certain strong narcotics, such as dhatura, kuchla, etc.

56. Please refer to paragraph above.

57. Please refer to paragraph 39 above.

58. In respect of hemp drugs the present system is working well.

60. Not produced in this district, and we are unable to say if the system of control requires modification.

61. Similar.

62. It should be controlled in the way that cultivation of ganja is controlled.

63. License fees for wholesale vend may be imposed.

64. None.

65. No suggestion.

66. Yes; because the quantity fit for use is different.

67. None.

68. None, as we are told and understand.

69. Yes; the authorities do not open a shop where it is disliked; but people seldom have any opinion on this point.

70. No; all ganja used is taxed, but not bhang.

249. Evidence of the DISTRICT BOARD, Mymensingh (Sub-Committee).

1. Practical knowledge, coupled with information collected from friends and books and newspapers, forms the basis of our answers to such questions as are comprehensible and could be discussed freely.
 2. Yes. The definitions enunciated by Dr. Prain in his report of 21st June 1893 as to siddhi, bhang, charas, and ganja are acceptable for this province, and these products are locally known as such.
 3. The districts in which the hemp plant grows spontaneously are (1) Dinajpur, (2) Jessore, (3) Rajshahi. It is abundant in the Naogaon Sub-division.
 4. As far as we are aware, this plant is known as *Cannabis indica*.
 5. Beds of rivers, low lands, and a warm climate favour the growth of the wild hemp.
 6. As a rule, the growth of the wild hemp is ordinarily dense.
 7. There is no cultivation of the hemp plant in our province.
 8. No cultivation, hence no increase or decrease in the area.
 10. There is no regular cultivation of the plants; but some people rear those that grow spontaneously.
 12. No special cultivation of the wild hemp for the production of ganja has been brought to light. Spontaneous growth in the Darjeeling Terai has led some cultivators (Mumis by caste) to use the stems of the plant as drugs in curing bad legs and foot-sores.
 13. Yes; for other particulars, *vide* answer to question No. 5.
 14. Not in this district generally; but (c) bhang is now and then kept for use by low class people.
 15. Ganja and charas are not prepared in this district.
 16. No.
 17. By the lower class of Hindus and Muhammadans.
 18. Yes; the drugs do deteriorate. The deterioration is large when they are exposed to air and damp and not properly secured. With ordinary care, the drugs keep good for years. Proper packing goes a great way in preventing deterioration.
 19. Ganja and charas are used for smoking. But ganja is not unfrequently used as medicine.
 20. The up-country men who have migrated to our district mostly use the drugs. The lower class of Hindus and Muhammadans have also largely taken to use them. The sanyasis, vaishnavas and brahmacharis do also use these drugs.
 21. Chur ganja is preferred to flat and round ganja. But the flat one is ordinarily used, the price being much less than the other two kinds.
 22. As a rule native charas is used. Foreign charas does not find its way here.
 23. Bhang is seldom used for smoking. The occasion is very rare. Ganja-smokers failing to have a supply of ganja, smoke bhang, though reluctantly.
 24. Bhang is mostly drunk by the up-country men. Sometimes small balls of bhang are prepared and distributed amongst people as a mark of respect to the goddess of cow when a new calf is born.
 25. The use of ganja and bhang is on the decrease. This decrease is partly attributable to the rise in the duty and partly to scarcity. Charas is not used in this district.
 26. Seventy per cent. of the consumers are habitual moderate consumers; 20 per cent. coming from the class of sanyasis, vaishnavas and brahmacharis are habitual excessive consumers, and 10 per cent. are occasional moderate consumers.
 27. Seventy per cent. of the consumers come from among the low class of Hindus and Muhammadans.
 28. Average allowance and cost of bhang and ganja per diem—
 - (a) 2 annas to $\frac{1}{2}$ tola, price 2 annas.
 - (b) One tola to chhatak, from 4 annas to 12 annas.
 29. Bhang is mixed with a little quantity of sugar, pepper, and water.
 - Ganja is mixed only with a little bit of dry tobacco leaf. Dhatura is sometimes mixed.
 30. As a rule ganja and bhang are practised in company and seldom in solitude. Children never consume these drugs.
 31. The habit of consuming these drugs is easily formed in company. Yes; it is difficult to break off, and there is every tendency for the moderate habit to develop into the excessive.
 32. Ganja is sometimes used in connection with religious custom only as respect to the great deity, the Mahadeva. This custom is regarded as essential in the strictest sense of the word, and it does not lead to the formation of the habit.
 33. The consumption of each of these drugs is generally regarded more as social than religious. Hemp plant is never worshipped on any occasion by any sect of the people.
 34. Yes; certainly, one who is addicted to ganja-smoking cannot do without it. Any attempt to forego it would affect the health seriously. But this is not the case with one who is addicted to drinking bhang, which could be done without. Gradually the use may be dispensed with.
 35. Very likely illicit consumption will be rife if licit consumption is stopped. It is not easy to enforce absolute prohibition, which would assuredly give rise to serious discontent among the consumers. But an enforced prohibition shall not lead to a political danger, but may be followed by recourse to alcoholic stimulants and opium.
 36. Yes; cheap outstill liquor has attracted ganja-smokers in many cases.
 39. Smoking and drinking preparations of the hemp plant are both injurious to health.
 40. Yes. They are sometimes prescribed as medicine in cattle-diseases; but they are never prescribed generally by any school of native doctors for any sort of illness.
 41. (a) No.
 - (b) Yes.
 - (c) No.
- Agriculturists, day labourers, and coolies, use

the drug for the above purposes in a moderate dose.

42. No; moderate use of these drugs is said to be conducive to health in certain circumstances. But generally the use is injurious.

43. Certainly they are.

44. Moderate use of these drugs is refreshing. It does not allay hunger but alleviates fatigue. It certainly creates appetite. The after-effects are not so telling as the use of liquor. One who is habituated to use these drugs feels uneasiness, when in want of them.

45. (a) Yes.

(b) Yes.

(c) Yes.

(d) Cannot say.

(e) Cannot say.

(f) It is refreshing, and makes the consumer all life and vigour for the moment. Cannot say it produces insanity.

Moderate use of these drugs never makes the consumer insane unless excessive use is resorted to.

46. Habitual excessive use of ganja or bhang is a fruitful source of brain disease. It brings on torpor, and insanity is its inevitable result.

47. Habitual moderate use of the drugs is not a hereditary habit. It does not affect in any way the children of the moderate consumer.

48. Nil.

51. Yes; there does not seem to be any connection.

52. Excessive use of these drugs may give rise to offences less heinous than those committed under the influence of liquor.

53. No.

54. No.

55. (a) No.

(b) Cannot say.

56. The effects of hemp do not seem to be particularly modified by the admixture of other substances.

No such information could be given.

57. These cases are rare, and call for no remarks.

63. There can be no objection to the system of vend of preparations of ganja, charas, or bhang if the system of vending is at all to be retained. But, as a rule, the system is injurious.

64. Cannot answer.

65. These drugs have been already too highly taxed.

66. Certainly. The existing rates are generally approved.

There is scarcely any ground for the rates being different.

67. Certainly not.

69. Wishes of the people are never consulted or considered. Local public opinion ought to be consulted and considered.

70. Cannot say.

250. Evidence of the DISTRICT BOARD, Monghyr (Sub-Committee).

2. These definitions may generally be accepted for this province. Ganja is not cultivated in this district. Bhang grows wild here, and both male and female plants are collected for the preparation of bhang. Siddhi is locally known as bhang.

3. Bhang grows wild in this district, and plants are scattered.

4. Not known by any other name in this district.

5. Climate temperate, elevation low.

6. Ordinarily scattered, grows ordinarily in low ground, such as ditches and in uncultivated lands.

14. (a) Not prepared.

(b) Ditto.

(c) Prepared from wild plant in this district. In the northern parts of this district, about 200 to 300 maunds annually.

15. None prepared from cultivated plant, as plant is not cultivated. Wild plant collected and dried for some days in the sun. Leaves then shaken off (seeds separated as far as possible) and sold for eating and drinking.

(A) Charas is smoked. Prepared tobacco is mixed with it. A small quantity is put into the centre of a small ball of tobacco, which is then heated on a fire till it cracks. The two are then rubbed together and are ready for use (smoking).

(B) *Eating*.—Dried leaves are soaked in water and then smashed in a stone mortar with spices (bhang massala, pepper, aniseed, etc.). This is made into pills and eaten.

(C) The pills above described are rubbed up with sugar and water and sometimes with milk and rosewater for drinking.

16. Yes, and it can be prepared from the plant wherever grown. Ganja and charas are not ordinarily made from the wild plant wherever grown, but may be so prepared by those who understand special points in the cultivation of the plant.

17. No particular class make them—generally Babbans and Rajputs and some low class people also. Also by wholesale dealers in the drug as well as by the consumers.

18. All deteriorate by keeping. Bhang quite loses its effect in five years; three years old is very mild. Ganja keeps less, loses power in two years. Damp hastens deterioration. Keeping off damp does not wholly preserve these drugs.

19. Yes; ganja is very rarely eaten; when so used it is mixed with bhang and then eaten. This practice is very rare. Mostly in the North-Western Provinces.

20. Almost all classes smoke ganja. Use of charas is very rare in Monghyr District. Proportion of population cannot be given definitely. Fakirs prefer ganja-smoking to the use of bhang.

21. Chur ganja is preferred for smoking. But all kinds are used in most parts of the district. Localities, etc., cannot be particularized.

22. Charas is rarely used; those who smoke it get it from Calcutta or Benares.

23. Is very rarely used by ganja-smokers as a

substitute for ganja and then mixed with tobacco leaves (surti).

24. Rajputs, Babhans, Chhatris, Baniyas, etc., use bhang, but most drink it. The proportion between (a) and (b) cannot be specified, as the drug is used privately, much as Europeans use tea, only not so widely of course.

25. Ganja-smokers seem to increase in number, but the amount used per annum seems lessening, owing probably to rise in duty and price. Use is becoming moderate. For bhang nothing can be said, as it is used as prepared privately from the wild plant. Only about 1 per cent. of those using hemp drugs in this district use charas.

26. For ganja—

- (a) About 60 per cent.
- (b) „ 20 „
- (c) Very difficult to say.
- (d) Ditto.

For bhang nothing can be said. Probability is that there is no very great excess, but no figures can be obtained for reliable results.

27. For ganja—

- (1) Rajputs, Brahmins, Babhans, *i.e.*, agricultural classes.
- (2) Baniyas, Agarwalls, and Chhatris, *i.e.*, trading classes.
- (3) Kahars, Dhanuks, and other labouring classes.
- (4) Fakirs and religious mendicants.

Note.—Sadhus and sanyasis smoke habitually to excess. (1), (2), and (3) represent habitual moderate consumers.

28. For ganja—

- (a) Two-sixteenths to three-sixteenths of a tola, worth about 2 to 3 pice (6 to 9 pies).
- (b) Quarter to half tola weight, worth 4 pice to 8 pice, *i.e.*, 1 to 2 annas per diem. Sanyasis may use more.

For bhang—

- (a) One tola = 1 pice = 3 pies.
- (b) One chhatak = 2 oz. = 4 pice worth per diem.

29. (a) With ganja, dried tobacco leaf and otto of roses. With bhang, aiseed, pepper, cucumber seed, sugar, milk, rosewater, and kasni. The above is the bhang massala in use in these parts. Dhatura is not ordinarily used. The object of bhang massala is to reduce the strength of the intoxicant and to make it more palatable, improve the flavour, etc.

30. Smokers use ganja more in company. But these drugs are used both in solitude and in company. Mostly males, but females also, chiefly prostitutes and sanyasi women, not children. Smokers usually begin at the age of 15, much as European children begin the use of tobacco.

31. Much as with other intoxicants.

32. Nothing special in this respect. Use of these drugs not included in the Hindu ritual. Ganja smokers invoke Siva.

33. Bhang is considered more beneficial than harmful and is used by those moving in good society, while ganja-smoking is held in disrepute and associated with bad habits and badmashes. No one worships the hemp plant.

34. Yes, certainly, and for obvious reasons; specially the class of religious mendicants, etc. Universal prohibition would be attended by serious dissatisfaction. Ganja is said to be the poor man's only luxury in this country.

35. No, certainly not. Prohibition would probably be followed by smuggling to a very great extent, and would, besides, lead to very great general dissatisfaction. The prohibition could not be enforced with any practical result because of the wide-spread smuggling that would at once result. The discontent so caused would certainly be serious, and the feeling aroused would be much the same as that which would follow in England on the stopping compulsorily the use of beer and tobacco. The prohibition would not be followed by the use of alcohol, but by wholesale smuggling of hemp drugs.

36. Practically none.

37. The effects of ganja are said to be more heating and keener. Intoxication more marked and more violent. Charas much milder in effect though actually a much stronger drug, but used in greater dilution.

38. Not known. Chur ganja preferred.

39. Eating ganja more injurious than smoking. No special difference between the effects of smoking and of eating bhang.

40. Bhang used in cattle disease and in intestinal disorders by native physicians; also very useful in dysentery. Ganja used as a preventive of the effects of damp and exposure to malaria and said to be very efficacious.

41. Bhang in moderation promotes appetite, much as moderate use of alcohol; not so with charas. Ganja-smokers are unanimous in saying that it increases appetite, gives staying-power under exertion, and allays fatigue.

(c) Ganja is a good preventive of malarial disease. Excessive use is damaging.

42. Within the limits of the answer to 41, the moderate use of these drugs is harmless. Experience of the drugs teaches this lesson. Habitual moderate consumers do not seem to suffer. This refers to bhang. Ganja-smoking is said always to be harmful because it is so rarely indulged in moderation.

43. Yes.

44. Immediate effect is a slight refreshing intoxication. It allays hunger for an habitual consumer and creates appetite in a beginner. Effects of ganja last half an hour or so. Want of subsequent gratification produces uneasiness in habitual consumers.

45. The habitual moderate use of bhang is held to be not injurious.

With regard to ganja.—It affects the physique and gradually impairs digestion. If moderately used, increases appetite. Without proper food must weaken digestion. Causes dysentery if used in excess. Produces laziness, but not immorality or debauchery.

If used in excess deadens the intellect and produces insanity of a permanent type: sometimes with melancholia, at other times with a homicidal tendency.

46. *Vide ante.*

47 and 48. No.

49. It has an aphrodisiac effect. Excessive use may produce impotence. Its use by prostitutes not estimated.

51 to 55. *Vide* memorandum by District Superintendent of Police, to Inspector-General of Police, Bengal.

56. The effects of all these drugs are modified

by the admixtures noted in previous answers. Dhatura is not used in this district.

57. Ganja is sometimes eaten by sanyasis to produce greater intoxication.

251. Evidence of the DISTRICT BOARD, Arrah.

1. Enquiries from the vendors and consumers of the drugs.

2. Yes. Bhang, bang, subji and siddhi.

3. Monghyr and Bahraich (Oudh).

4. (*Vide* reply to 4. 2.) All refer to the same plant.

5. Damp climate, moist soil and rainfall.

7. No.

10. The vendors of narcotic drugs are Sunris.

14. No.

18. All. They lose their effects in time, and keep good with ordinary care for a year only.

19. Yes.

20. All classes of Hindus, specially the villagers; nearly one-third of the population smoke ganja. Charas not used in this district.

21. Flat.

22. Charas not used in this district.

23. Never in this province.

24. All classes of Hindus; about one-fourth of the population consume bhang.

25. On the increase.

26. (a) One-half.

(b) One-fourth.

(c) One-fourth.

(d) One-twentieth.

27. (a) and (c) from all classes of Hindus, and (b) and (d) from orders of mendicants (sadhus, jogis). No particular habit of life or circumstance leads to the practice.

28. *Ganja*—

(a) Half an anna.

(b) Four annas.

Bhang—

(a) One pie.

(b) Half an anna.

29. Ganja used in smoking with tobacco.

Bhang.—(a) Ordinarily, by the poor—pepper and occasionally molasses.

(b) Exceptionally by the rich—

Bhang *sherbet*, ingredients—Sugar, milk, rosewater, almonds, cucumber seeds, coriander, cardamom and pepper.

Mussala or *majun* ingredients—Ghi, milk, sugar, almond, pistachio.

30. Generally in company, confined to the male sex, but not to any time of life. None consumed by children.

31. No.

32. None in this province. Consumed excessively by all classes of Hindus on the occasion of the Holi festival.

34. Only to the mendicants, the sadhus and the jogis.

35. No. But the discontent will not amount to a political danger as the drugs produce a sedative effect on the consumers who are generally a quiet sort of people.

Not necessarily, as the consumers of the drugs are those who abstain from alcoholic drinks and fermented liquors.

37. Charas not used in this district.

38. The flat is the most efficacious.

40. Bhang used by the *baidis* or the native physicians.

41. The moderate use is said to be beneficial.

42. Yes.

43. The consumers of the hemp, moderate or excessive, are always inoffensive to their neighbours.

44. Stimulant. It is refreshing and produces intoxication.

Ganja allays hunger, but bhang creates appetite. The effect of bhang lasts four, and that of ganja five hours.

The after-effects are giddiness, dimness of sight and laziness.

45. The habitual moderate use of bhang is innocent, but the habitual moderate use of ganja and the excessive use of bhang is injurious physically, mentally and morally. The use of ganja engenders asthma and bronchitis.

47. No.

48. See reply to question 45.

49. They are sometimes used as aphrodisiac.

51, 53, and 54. No.

55. Yes.

57. Neither eaten nor drunk in this district.



सत्यमेव जयते

EVIDENCE OF ASSAM WITNESSES.

1. *Evidence of Mr. G. GODFREY, Commissioner, Assam Valley Districts.*

1. I have had no special opportunities of obtaining information on the subject; all I say is based upon recollection in my experience as a district officer.

3. In all the districts of the Assam Valley. It is not specially abundant in any district as far as I know; it seems to thrive in places where there are homesteads or where there have been homesteads.

4. The Assamese call it "bhang;" it is the wild ganja plant, I believe.

5. It seems to grow anywhere. I have seen it growing abundantly in Orissa and parts of Bengal.

6. In dense patches.

7. It is surreptitiously cultivated for production of ganja, chiefly, I think, by tea garden coolies, all over the Assam Valley; but this sort of cultivation is of course kept in check by the district officers, and people who are found so cultivating are prosecuted under the Excise Act; so there is no considerable area under this sort of cultivation.

9. I think the plant springs up of itself, sometimes perhaps from the seed of the cultivated Rajshahi ganja, which is consumed in the province. It is then tended by being kept weeded; beyond that there is no care, I think, taken of the plant.

10. Chiefly imported coolies from Bengal or immigrants from that province.

12. What I have said above refers to the so-called wild hemp.

13. It is not allowed at all.

14. No; (a) is prepared—if it can be called preparation—by merely drying the plant in the sun, but the extent to which this business is carried is exceedingly small.

15. As far as I know, ganja is only smoked in the province. I have no knowledge of (B) and (C).

16. Ganja I think can; but it is of a kind far inferior to the cultivated ganja in its narcotic properties.

18. If kept in a dry place, I think they keep their flavour well for at least a year.

19. Ganja as far as I know is used only for smoking.

20. The immigrant Musalmans from lower Bengal are addicted to ganja-smoking; they form a very small proportion of the population. I cannot give exact proportion.

21. Flat I think.

25. I have not got the reports of the Excise Department with me, so I cannot say. Probably with the increase of the immigrant population the consumption of ganja is on the increase.

30. Generally in company the chillum is passed round, as the huka is in the case of tobacco-smoking.

33. It is not in disrepute as far as I know.

34. Yes, it would be like depriving a poor man of his beer or his tobacco.

35. (a) No.

(b) Yes, I think so.

(d) Yes.

(e) No.

(f) Yes, to excessive tobacco smoking or to consumption of opium.

36. No, except perhaps among the superior classes of Bengalis who can afford to buy spirits in place of ganja.

40. Yes; I believe ganja is used as a medicine for cattle; this is the plea sometimes put forward when persons are prosecuted for cultivating the wild ganja plant.

41. I am not aware that it has any beneficial effect; it produces a sort of content like tobacco does if used in moderation.

43. Yes, I think so certainly.

44. I have not had time to make inquiries on these points.

46. The excessive use of ganja has most pernicious effects, and it must be remembered that what is a moderate quantity for one person may be an altogether excessive quantity for another. It leads to insanity, temporary and permanent; but I have made no special study of the subject.

53. No.

58. I think it works well.

62. It is absolutely prohibited.

63. No.

64. The system seems to work fairly well.

65. Yes.

66. Yes, they are taxed according to the quantity of the consumable article contained in a given weight of the product, i.e., one kind has more stalk, etc., than another; the flowers, again, are more abundant in one kind than in another.

67. No.

69. No, I believe not. No, I see no occasion for consulting local opinion in the matter; the consumption of the drug is not very extensive.

Oral evidence.

Question 1.—I came to India in October 1873 and served in Bengal till January 1875, from 1875 to 1879 in Assam, and from 1879 to 1883 chiefly in Orissa; since November 1883 in Assam.

I have been in all parts of Assam except the Naga and Garo Hill districts. As Commissioner I am in charge of the six districts of the Assam Valley. I was two months in the Surma Valley. I officiated as Commissioner of Excise for six months, and at the same time held the office of Inspector General of Police and Jails.

Question 3.—I have never seen the hemp plant growing in the jungles where there has never been any human habitation. I have always regarded the plant as an escape from cultivation or the result of accidental sowing rather than as an indigenous growth. My answer refers to the Valley districts. I did not observe it in the Khasi Hills, though I hear it grows there, and I believe it to be the fact. Cases frequently occur of the hill ganja being brought down into the Gauhati district. This, I believe, comes from the Khasi Hills, and I am not aware of any import from the Naga or Garo Hills. I was in charge of the Golaghat sub-division, which borders on the Naga Hills, for two years, and no instance of import of ganja occurred during that time. I had similar experience regarding the Garo Hills while I was in the Goalpara district.

Question 7.—I have no reason to suppose that the Assamese consume ganja at all, except those who go by that name in the Goalpara district. By Assamese I mean the indigenous inhabitants of the six districts of the Assam Valley. The people of Sylhet and Cachar consume ganja, and so do a few in the Khasi Hills. I cannot speak about consumption in the Naga and Garo Hills. The whole of the Khasi Hills, except Shillong and the Jaintia Hills sub-division, is practically foreign territory, and the cultivation of hemp plant is not prohibited in that region. I am not prepared to say whether the Naga and Garo Hills are to be regarded as British territory, but the British Government has police and civil jurisdiction in them. In these hill tracts the police are not to interfere with the hill people themselves in the matter of cultivation, possession, and sale of ganja, but at the same time not to allow the advantage of these privileges to British subjects.

Question 14.—The Assamese apply the name bhang to the ganja which is imported from Rajshahi and to the home-grown drug as well. I do not know bhang as a distinct product. I do not know that any part of the plant is used specially for preparing a drink. I have heard of a mixture made of gur and milk with ganja which is called *ghota*.

Question 35.—By far the larger proportion of the population of the six districts of the Assam Valley consume opium; next in point of number

come the consumers of country spirit, and last the users of ganja. The proportion of consumers of opium to those of country spirit is about as 10 to 1.

Question 40.—The plea that is raised by persons prosecuted for smuggling, that they are in possession of the drug as a medicine for their cattle, is admitted if supported by sufficient proof. I don't think this plea hampers the excise administration, because the plant as used for cattle appears to have very little of the narcotic property.

Question 46.—My opinion that ganja leads to insanity is based on personal experience and hearsay. I have come across cases in the jails in Assam of persons whose insanity was said to have been caused by ganja. Such people would recover under confinement, and I have known them come back again in the same condition. I cannot say for certain that I know of any case of permanent insanity from ganja. Such cases will probably be found in the Lunatic Asylum at Tezpur. I had no occasion to make particular enquiry regarding the cause of insanity in the cases I saw in the jails. I speak only from hearsay as to the cause.

Question 51.—I think that the immoderate use of ganja does lead to crime, but I cannot recall any case that I have had to deal with. As Inspector General of Police I cannot remember that the drug led to crime or misconduct among the subordinate police officers, and to the best of my recollection there was no such case.

Question 59.—Looking at the wide range of the retail price of the drug shown in the Excise Commissioner's memorandum, I should say that it is due to the competition of retail vendors; and also to the fact that the wholesale vendor can charge the retail vendor what price he likes. There is a disadvantage from the view of excise administration, in that the wholesale vendor makes a profit which might go to Government. It is advantageous in limiting consumption. If a system by which the price at which the wholesale dealer should sell to the retail dealer was fixed it would result in reducing the profits of the wholesale dealer and secure a larger portion for Government. I should not object to the introduction of such a system. To assimilate the ganja management more closely to the opium system by Government taking over the crop and supplying the retail vendor direct, would be open to the objection that Government would appear to be identifying itself too closely with the business of selling the drug. There are other objections, *viz.*, that extra establishment would be required, more work would be thrown on the Government officers, and some risk would be entailed.

2. Evidence of MR. J. J. S. DRIBERG, Commissioner of Excise and Inspector General of Police and Jails.

1. I have not had much experience of hemp drugs. From 1864 I have been in the Assam Valley and in the Khasi and Jaintia Hills. In the Assam Valley districts the consumption of hemp drugs is small, and is used almost entirely by foreigners. My experience has been chiefly in regard to opium, which is largely used in the Assam Valley districts, and I have made a study of opium, not of hemp drugs. Since 1890 I have been Excise Commissioner of the province in addition to other duties.

2. Yes. The definitions given apply. But *siddhi* or *subji* or *patti* is scarcely known here, and *bharg* and *ganja* are usually applied to the same article, and in many parts, *ganja* is known as the excise article, and *bharg* as the wild or hill plant. I have never seen *siddhi* or *subji*.

3. The hemp plant grows with equal abundance in all the districts of the province and in the semi-independent hills beyond the frontier. It is never seen in forests or other lands remote from

villages, but always near villages or on abandoned village sites.

4. Bhang and ganja. Yes, I think it is the same plant.

5. It grows in the hills up to, say, 5,000 feet, also in the plains; but I think the best ganja is produced in the hills from one to three thousand feet.

6. Dense.

7 to 10. The cultivation of the hemp plant is strictly prohibited.

11. Illicit cultivation is from the seed of the excise ganja; but where the seed has once been sown, the plant reproduces itself.

12. It is cultivated surreptitiously in every district and in the adjoining hills, and more largely by the Nagas on the Sibsagar frontier and Miris on the Lakhimpur frontier. I cannot say if the male plant is extirpated.

13. Cultivation is prohibited altogether, but would be quite practicable in every district.

14. No.

17. None made in the province.

18. Damp and white ants affect ganja if not properly stored. I have known ganja in store-houses fit for use after two years. Protection against damp would prevent deterioration, I think.

19. Charas not used. Ganja is almost invariably smoked, occasionally diluted and drunk as a sherbet.

20. In the Assam Valley districts consumption of ganja is confined almost entirely to foreigners, garden coolies, carters, traders, sepoys, etc. In the Surma Valley it is used by the population more generally.

21. It is difficult to answer this question. One year there is more demand for flat ganja, another year for round or chur. Much depends on the price at which the vendors can obtain it from the goladars, and the duty. In this province flat ganja is chiefly used. See figures at page 36 of the latest Provincial Excise Report.

22. Charas is not used.

23. Yes. But to a small extent only, and is not confined to any classes or locality.

24. Bhang is rarely used. It is eaten, drunk, and smoked by no special classes or in special localities.

25. On the decrease, owing to higher prices due to increase of duty and license fees and to reductions in the number of shops.

26. I cannot give any information, but am informed that habitual moderate consumers form by far the larger portion of consumers.

27. Coolies in gardens, carters, and foreigners are the consumers.

28. Ganja—

(a) $\frac{1}{8}$ to $\frac{1}{4}$ tola per diem.

(b) More than that—up to $\frac{1}{2}$ tola.

29. (a) Only tobacco.

(b) Occasionally sugar and water and made into a drink. I have not heard of the use of dhatura. I do not know "bhang massala."

30. Invariably in company and only by the male sex. Children do not use these drugs.

31. The habit, no doubt, is easily formed. I do not think it is difficult to break off, but I have

no information. I do not think there is a general tendency for the moderate habit to develop into the excessive.

32. I do not think that amongst the ganja-smokers in the Assam Valley, who are usually low class people, any religious custom is involved, but in the Surma Valley the use of ganja is connected with religious ceremonies, but I am not personally acquainted with details.

33. No doubt, the use of ganja is considered disreputable—not amongst the consumers themselves, but by the more respectable people. The habit is considered bad and immoral, hence the disrepute with which it is viewed by non-consumers. I do not personally know of any custom of worshipping the plant.

34. Yes. I think it would be hard to stop the use of the drug, and a distinctly serious privation to habitual consumers, just as it would be to stop the opium of opium-eaters or the beer of beer-drinkers.

35. No. It would be useless to prohibit the use of ganja in a province like Assam, surrounded as it is by independent hill people, who would cultivate it in their hills and smuggle it down with little risk of detection. Any prohibition will only lead to the increase of illicit consumption and to the secret use of the drug, which would be decidedly bad. Of course to stop cultivation in Bengal and the prohibition to the use of excise ganja could be enforced, but there would be serious discontent, though in this province it might not amount to a political danger, and the prohibition would be followed by recourse to opium and in some cases to alcohol.

36. No; I think not.

37 and 38. I have no information.

39. My experience, such as it is, is confined to smoking, though I have seen drinking, but to so small extent that I cannot make comparisons.

40. (a) I have no information.

(b) Yes, I believe ganja is used in treatment of cattle.

41. (a) I have heard it is a digestive.

(b) Yes, decidedly so. It helps a man to travel long distances without food. I had a syce who went 60 miles in 18 consecutive hours merely smoking ganja and was quite fit the next day.

(c) and (d) No information. Travellers and others who have to undergo fatigue use it in moderation habitually.

42. I consider it harmless. I know of no cases where its moderate use has done harm.

43. Yes, as far as I know.

44. It is refreshing, allays hunger, and I don't think produces any after-effects. I have no doubt that the want of ganja to a habitual would make him uneasy and make him long for his usual dose.

45. (a) Not that I am aware of.

(b) and (c) No.

(d) Not that I am aware of.

(e) No.

(f) I cannot answer this. My own opinion is that the connection between the use of ganja and

insanity is much exaggerated, and is a good deal due to the fact that the police in the case of a lunatic have to fill up a form and state the supposed cause of insanity and they give the popular reason—use of ganja.

46. I must leave this for a medical expert.

47, 48, 49 and 50. No information.

51. No, I cannot connect crime with the moderate use of the drug. In the Assam Valley we have no habitual or professional criminals. In the Surma Valley there are river dacoits, but I cannot say that the fact of their being river dacoits is in any way connected with the use of ganja by the people of Sylhet and Cachar. The conditions of Sylhet are similar to the conditions of the neighbouring Bengal districts, and probably more useful and reliable information could be furnished from that province.

52. I do not think that ganja is used to excess to any extent. I have known it said that murders have been committed when the murderers were intoxicated with ganja, but in most cases there was little or no foundation for the statements.

53. Amongst garden coolies, when a man murders his wife, the imputation is that he was intoxicated with ganja, but my experience is that ganja is not responsible. The murderer probably was a consumer, but I never knew that the ganja had led to the murder or was the cause of it in any way.

54. I don't think so. At any rate I cannot give a single instance.

55. Not in this province.

56. I have no information. I have never known dhatura used with ganja.

57. Ganja is smoked, very rarely drunk. I don't know of its being eaten.

58. I consider the present system as good as any that could be devised. The object is to make ganja as expensive as possible up to a certain limit and not to afford too great facilities to people to obtain it, and to reduce and restrict consumption, and this is obtained under our present system.

60. Not produced in the province; we import from Bengal.

61. Not produced.

62. None in the province.

63 and 64. None.

65. I can suggest nothing.

66. The different kinds of ganja yield different quantities of the drug, and so I think different rates fair; but more reliable information could be obtained in the producing districts.

67. None.

68. There are shops for the sale of ganja, but as a rule the ganja is carried home and used. I see no objection to these shops.

69. As far as possible we consider the wishes of the people. As a rule we only open new shops when a demand has arisen for ganja and indicated by application by the people. I would not go beyond this.

70. In order to a correct understanding of our difficulties in connection with the excise on ganja, it is advisable to realize our position in regard to

the hill tracts round and within the province, and to consider the system of administration in those tracts, and how far we are in a position to exercise any control over their inhabitants. All these hill tracts produce ganja, which is smuggled into the plains, so that, irrespective of excise ganja, we have in Assam to deal with the so-called wild ganja, which grows luxuriantly in the plains districts, and the hill ganja, which is surreptitiously imported.

Assam is divided into three distinct portions: the Northern or Brahmaputra Valley, the Southern or Surma Valley, and the Hill districts—the Garo Hills, the Khasi and Jaintia Hills, and the Naga Hills—which comprise the range of mountainous country running east and west and forming the watershed between the two valleys.

I will first take the Brahmaputra Valley, which consists of the districts of Goalpara (on both banks of the Brahmaputra River), Kamrup (also on both banks), Darrang (on the north bank), Nowgong (on the south bank), Sibsagar (also on the south bank), and Lakhimpur (on both banks). I will begin with the hills on the south side, on the borders of the Goalpara district. We first come to the Garo Hills. This tract of country was formed into a Deputy Commissionership in 1866, and is administered under special rules. Though we have excise shops in Tura, the headquarters of the district, we interfere as little as possible in excise matters with the people and have no excise shops in the interior. Proceeding east we come to the Khasi Hills. Here we only possess a few small villages, ceded to us under special circumstances. These include the tracts of land on which the stations of Shillong and Cherrapunji are built. The greater part of the hills consists of the territories of Native Chiefs in subsidiary alliance with the British Government. The people govern themselves through their elected rulers. They pay no revenue to the British Government, but we, on behalf of the Chiefs, manage their mines and forests on condition of recovering half the profits from these sources. Petty crimes are dealt with by the Chiefs and only homicide and a few other heinous offences are referred to the Deputy Commissioner. In these hills, outside the station of Shillong, which is inhabited by foreigners, we have no excise system and no control over the people in excise matters. They distil their own spirits. To a certain extent the Deputy Commissioner's influence enables us to check the importation of excisable articles into the plains, at any rate openly. Next to the Khasi Hills we come to the Jaintia Hills. Here the Deputy Commissioner has more control over the people. The Syntengs (the people of Jaintia) make their own spirits, and ganja grows in their hills. To the east of the Jaintia Hills are the Mikir Hills and the Naga Hills. The various Naga tribes extend southwards up to the great Patkoi Mountains and eastwards to the Noa Dehing River—a portion of the Naga Hills forms the district, which is known by that name. This tract is administered by a Deputy Commissioner under special rules, but we do not interfere with the people in excise matters. They make their own spirits and their "zu" (rice beer). We have shops in the station of Kohima, maintained for foreigners, and we discourage the Nagas from frequenting them. The remainder of the Naga tribes are practically independent. They are supposed to be British subjects, but it has not been found expedient to extend to them our laws and regulations; a small tract of Naga

country is under our political control and is visited yearly for a few days by the Deputy Commissioner with a strong armed guard, but beyond that, and over the Nagas, on the south of the Lakhimpur district, we exercise no control whatever. In the Naga Hills ganja grows profusely. Proceeding further we come to the Khamptis and Singphos, over whom we exercise no jurisdiction; and thence to the north of the Brahmaputra Valley we have various tribes; first the Mishmis, against whom we sent an expeditionary force a few years ago; then the Ahors, with whom we are now at war. Then proceeding westwards come the Miris, the Daffas, and the Akas, all savage races, who are practically independent. We consider that all the territory inhabited by these people is British territory, but we have never extended our control over the people in any way. In all these hills ganja is grown and is brought down to the plains—the Miris specially are great offenders. Passing on from these races we come next to Thibet and Bhutan, countries under recognised Governments, with whom we have treaties, but we have no control over the people, and their own Governments have very little more, and we have had many instances of ganja being brought down from both Thibet and Bhutan.

I have completed my remarks about the various hills and the tribes on the borders of the Brahmaputra Valley. In the Surma Valley the conditions are very similar. We have in that valley two districts, Sylhet and Cachar. Sylhet has on the north the Khasi Hills and the Jaintia Hills, to which I have already referred, and to the south the independent State of Hill Tippera, and from all these hill tracts ganja is exported. In Cachar we have to the north the tract known as North Cachar, which is administered by us under special rules, and where we have a rough system of excise. On the east we have the tributary State of Manipur—a State where both opium and ganja are produced and surreptitiously brought down to the plains,—and to the south the Lushai country, which we took over in 1890, and where we have a Political Officer supported by a strong force, and where it is inexpedient to interfere in excise matters.

It will thus be seen that in both valleys our districts are surrounded by hills inhabited by people over whom we have, with few exceptions, either absolutely no control or only a so-called political control. All these hill tracts are ganja-producing tracts, and the drug is brought down to the plains and secretly sold or bartered for other commodities. This condition of things increases our difficulties in regard to controlling the consumption of ganja and makes it incumbent on us to be constantly on the watch and to encourage our police by a system of rewards to be active and energetic. Every seer of hill ganja introduced into the plains means not only loss of revenue, but an increase to illicit and secret consumption. I think much has been done in recent years to discourage both the use of the wild ganja and the importation of the hill drug, but it is evident from the number of prosecutions that illicit cultivation and importation still continue to some extent, and any neglect to watch and check the practice will, no doubt, lead to a considerable increase in both production and sale.

Oral evidence.

I have never served in the Surma Valley; but I have travelled about since November 1889 as Inspector General of Police and Excise Commissioner,

visiting all the districts of the province. I have held charge of every district of the Assam Valley except Sibsagar.

Question 7.—The so-called wild plant is found in every district of the province. I think there is no such thing as wild ganja. It does not grow of itself like any other weed. As a rule, the plant is found in lands occupied by the owner's homestead. It is not found in his sugarcane field, for example, which may be far off from the homestead, but generally in the homestead enclosure, with vegetables, etc. I infer from this that the growth is very ordinarily surreptitious. I always encourage Magistrates to form a conclusion against a man in whose enclosure it is found; for the very fact that it is there is proof of control over it. He could have rooted it out; but the law requires evidence of cultivation, either of having tended the plant or of having concealed it. The practice of Deputy Commissioners differs considerably, more especially in regard to punishments.

In regard to cattle, I do not believe it is required to any extent for cattle. But it is curious that among the Assamese it is not found. It is a mere excuse by those who really want to use it that it is for cattle. I have no feeling that the Circular No. 28 of 1882 was necessary. I think it was issued on insufficient information. I never push it forward. I have never seen the stuff used for cattle; nor have I heard of its being used, except when the use is thus pleaded in excuse.

As to other grounds, I think there would be no hardship in ordering that a man should be held responsible for the existence of the plant in his homestead. I should not be prepared to go so far as to say "all occupied land," because fields are sometimes a mile off, and the growth there is very rare. The stuff requires manure apparently. I think what one sees on fields is from seed. The stuff springs from seed and then reproduces itself, being self-sown thereafter.

The stuff is found in the homesteads of foreigners and in the homesteads of Assamese near places where there are foreigners. In the interior, remote from tea gardens and the settlements of foreigners, it is not found. So in regard to fields it is found chiefly where there are foreigners. My objection to prohibiting the stuff in fields is merely that, as the fields are far away, and are sometimes not visited for months when there is nothing doing, a man might not see the stuff growing, and might be prosecuted without having any guilty intention. But I do not think that it would be impossible to carry out the prohibition. The above is the only objection I have.

It is a mistake to think that tea garden coolies have no land attached to their quarters. As a rule, inspecting officers insist on garden land being allotted for the production of vegetables. The following are the orders on the subject.

Rule 126 of the Rules made under Act I of 1882—"Where it is possible, sufficient garden ground shall be provided for each house or row of houses."

I may add that coolies, whose time has expired, often settle down, as land is so cheap in Assam. The hemp is found on the fields of these and other foreign settlers and also on fields near where there are foreigners. It is not found in the fields of remote villages with purely Assamese population.

I believe that this so-called wild hemp affects our revenue very considerably. It is used by certain consumers, and it is also mixed by vendors with excise ganja and sold. Prosecutions, as

shown by the Statement* I now put in, are most active in Sibsagar and Lakhimpur. These districts have the largest foreign or imported population. There is an account of a seizure of fifty-nine seers in one case in paragraph 72 of the Excise Report for 1887-88. It was in the Lakhimpur district. I was then Deputy Commissioner. At times, in certain districts, considerable energy has been shown. I do not believe it has resulted in oppression or false charges. But it has resulted in great increase of revenue. The nature of the offence is such that you cannot easily fix it on any one who has not the plant on his land. The circumstances, of course, show whether a plant has been accidentally or intentionally sown. My position would be to throw the onus on the accused of proving that the plant was accidentally there if it was his homestead.

Question 20.—The Assamese rarely use ganja. They are all opium-eaters. If I found the plant growing in an Assamese homestead, I should not conclude that the man was a consumer, but that he was raising it for sale. In Goalpara the consumption of ganja is larger than any other district of the Assam Valley. The indigenous population consume the drug more. The people of the Dhubri sub-division, excluding the Eastern Duars, are Bengalis. The rest of the district is Assamese.

The hill people do not use the drug to any extent. Very few of them take it. They are more opium-eaters. These people grow hemp to sell on the plains. There are political reasons, set forth in the answer I have given to question 70, against strong measures of repression in the hills. But the thing can, I believe, be done gradually. That is what we are doing in getting the Deputy Commissioner to use his influence to prevent sales to the people of the plains. The impossibility of making any great and rapid advance in the hills is no reason for not perfecting the system on the plains. In fact, the more perfect the system on the plains the less chance of smuggling from the hills.

Question 24.—All wild ganja is known by the name of bhang to distinguish it from excise ganja. Bhang proper is not brought in from Bengal, merely because no license is ever applied for. That is no doubt, I suppose, because the wild hemp is used for the beverage, and the Bengal bhang is not required.

Question 45.—As a rule, a lunatic is sent in (say) by a planter with a letter telling of his violence. The man is put in the jail for observation, and the police are ordered to make enquiry. They do so, and submit information in a prescribed form. The cause is a point they have to inquire into. If a man does not enter cause, I know by experience that the District Superintendent of Police gets a slip telling him to send a more experienced man, or fine this man for carelessness. The man must, therefore, look out for a cause. The readiest is ganja. There is another difficulty here, viz., that many of the lunatics are from other provinces, and nothing is known of them. The safest thing to say is "ganja." The police know that no further enquiry will be made, so they stick it down. I think also that a policeman would naturally tend to think rather of physical causes than of moral causes. If he did not see an injury to the head by a blow or otherwise, he would naturally look for something else that but a man's head wrong. I think that this con-

* Not printed.

sideration may also, to a certain extent, explain the popular idea. Ignorant people would look most naturally for physical causes. I think the causes assigned by the police here are generally incorrect (1) because I do not think the police have the ability required to make this enquiry, and (2) because they so seldom see people who are able to give them information. We have similarly unreliable information about vital statistics. There is no popular idea among the Assamese that ganja causes insanity. But among planters and others there is. This is due, I think, to the old official idea, which is due to custom.

The constables of the force are mostly Assamese. I have never had a case of any kind in respect to ganja or bhang, so I know nothing of their effects on the force. We have no excise establishment apart from the police. So also in regard to the jail population the matter has not come up.

Question 58.—There is one point in regard to which there is some difficulty, viz., the uncertainty of the price at which the drug is sold to retail vendors. It has several times occurred to me. The difficulty might be met by selling by auction the right of wholesale vend with a fixed price for supply to retail vendors. The price should be fixed so high as to leave a considerable amount of profit to the wholesale vendor on his transactions. The wholesale vendor is often the retail vendor. Thus, where there are thirty retail shops, the wholesale vendor may secure fifteen of them. I do not think that this would stand in the way of the introduction of the above system. I do not think that this system would affect the combinations among vendors referred to in Mr. Anderson's note, if (as I suppose) he means retail vendors. But no combination of wholesale dealers would be possible to raise prices if the price were fixed. As to combinations, I may add generally that I believe their effects are easily exaggerated. Some effort and care being applied, they are soon broken up.

Question 69.—I remember a case in which a planter, Mr. Spicer, one of the witnesses before the Commission, asked to have a shop removed from the neighbourhood of his garden. His request was refused, because the shop was an old one of eleven years' standing. The quantity of ganja consumed showed a real demand, and the situation of the shop was such that if the licit ganja was not supplied, illicit stuff from the hills would be consumed. This is the only case I can recall of a request to close a shop being refused. We get more such applications about liquor shops than about ganja.

Mr. Spicer was summoned to appear here. But no letter or telegram has reached him apparently on account of his absence from the district.

Question 59.—About the experiment made in Shillong of issuing ganja from the Treasury referred to in paragraph (m) of Mr. Anderson's note. In March 1892, when the Deputy Commissioner of Shillong was settling his ganja shops, he found that bidders had combined and would make no proper offer. He knocked down the two Shillong shops for Rs. 680 for 1893-94 against Rs. 890, the upset price. I refused to sanction this. There is no wholesale dealer in the Khasi Hills and no warehouse. The retail vendors get their ganja from the Gauhati warehouses on passes issued at Shillong on payment of the duty there. In order to break up the combination, I issued a license free to an official retail vendor,

who was not, however, a Government servant. I brought up the ganja at Government expense from Gauhati and issued it to the vendor at Rs. 29 per seer, a price calculated on the basis of average consumption yielding sufficient to pay the cost

of the ganja, duty, carriage, and the average license fees. All profits went to this vendor. This system is still in force, but will cease from the 1st of April, as for 1894-95 a good settlement has been effected.

3. Evidence of MAJOR M. A. GRAY, Deputy Commissioner, Khasia and Jaintia Hills.

51. (a) Not in this district.

(b) None in this district.

52. There is no excessive use of these drugs known in this district.

53. No; not here. No.

54. Not in this district.

55. No; not in this district.

4. Evidence of MR. J. D. ANDERSON, Deputy Commissioner; Officiating Commissioner of Excise.

1. I have been in charge of the Excise Administration of nearly every district in Assam, and am at present officiating as Commissioner of Excise.

2. Bhang in Assam has acquired an ambiguous meaning. Officially it bears the meaning given to it in the question, but in popular parlance bhang is wild ganja, whether dried or undried. Of the three varieties of ganja, flat ganja is sometimes called *mota dāl*, and round ganja is called *mihī dāl*.

3. The wild hemp plant grows abundantly all over Assam as a weed, but, like many other weeds, it is not a jungle plant. It follows in the tracks of cultivation. It is commonly found in deserted clearings and in the vicinity of growing crops. It is especially abundant in the hill districts, where the plant seems to be richer in the resinous matter which makes it intoxicating. Ganja is smuggled into the plains by hill people both from the Khasi, Naga, and North Cachar Hills in our own territory, and also from the Bhutan Hills and from Hill Tippera outside the area of British rule. It is also grown by the Miris in Lakhimpur and Darrang. It is largely consumed to the prejudice of excise ganja by the many immigrants, tea garden coolies, syces, etc., who live in the province.

4. It is known indifferently as ganja and bhang, but when a native of the province contrasts ganja with bhang, by the former he means the excise drug, by the latter the wild variety. In Sibsagar the plant when brought from the Naga Hills is called "Naga mohoni."

5. The plant is said to grow more readily in the hills and to require a considerable rainfall. But, as aforesaid, it is a common weed all over the province.

6. Where it grows, it grows densely, and I am told that it is a weed which it is extremely difficult to eradicate. I know of a garden in Shillong the owner of which has endeavoured for years to choke out the weed, but in vain.

7. The plant is not cultivated in the proper sense of the word, but it is occasionally fenced in and cared for when it springs up spontaneously.

8 to 10. See above.

11. No; but the contrary often occurs. I have frequently prosecuted ganja-smokers for raising plants from the seed of excise ganja.

12. The Miris, a hill tribe in Lakhimpur, undoubtedly fence in the wild plant on a large scale

for consumption and vend. In 1887-88 some Miris were punished for selling no less than 59 seers of bhang. The informant was one of our licensed vendors of excise ganja. Such cases are very difficult of detection, as Miris, Kacharis, and other semi-savage people live in the midst of dense grass jungle, and have obvious facilities for concealing cultivation. I am not aware that the male plant is ever extirpated.

13. Cultivation is forbidden all over the province, but there is no part of Assam where cultivation would be impossible.

14. The drugs mentioned are not prepared in this province.

15. So far as I know, ganja and charas are invariably smoked in Assam.

16. See answers to questions above.

17. Not made here.

18. Ganja is stored in small bonded warehouses as in Bengal. Its strength deteriorates rapidly. It will keep fairly good for about a year if protected from white ants, etc. But the damp climate of Assam rapidly removes its toxic effect.

19. So far as I know, hemp is only used for smoking, except on rare occasions, when fire or the chillum are not available.

20. The Sylhet Musalmans and bairagis are the only portion of our indigenous population who consume ganja. They are, in fact, a portion of the ganja-smoking population of Eastern Bengal. Any facts which the Commission may gather as to the use of ganja in East Bengal will apply equally to the districts of Sylhet, Cachar, and Goalpara. In the remaining districts the use of ganja is almost entirely confined to immigrant coolies, to the Gurkha sepoy in the Assam regiments, and the up-country constables in the police. Charas is not much used in Assam.

21. Since the duty has been increased, the proportion of chur and round ganja imported from Rajshahi has steadily increased. I append a table showing the extent to which this change has taken place. This Table (A) should be compared with Table (B).*

22. Charas is only used as a smuggled article, and I personally only know of it from hearsay. I have never even seen the drug.

Not printed.

23. Bhang is occasionally smoked when people cannot get ganja, but it is said to be very deficient in intoxicating qualities.

24. All ganja-smokers consume bhang when they cannot get the true ganja. But this rarely happens.

25. Table B and the appended district tables will show that the diminution in the number of shops, the competition for these shops, the increased rate of duty, and the resulting increase in retail prices have greatly reduced the consumption of excise ganja. That these causes have also led to an increase of smuggling is very probable. On this point I would call the attention of the Commission to column 8 of the district tables appended to Table B.

26. I have no means of answering this question. All consumers probably take ganja to excess on special occasions, such as, among Hindus, the Sivaratri Puja, the Bijoya Dasami day, etc. Again, habitual consumers on the eve of, or after, violent exertion take an extra dose of the drug. But I cannot say now what proportion of the total number of consumers may be regarded as moderate or immoderate consumers. This is a point on which only vendors could give us information, and even their replies would be subject to obvious limitations.

27. Coolies from Behar and the North-Western Provinces and servants from those districts, Nepalese in the Assam Regiment, traders, cowherds, etc., the indigenous (Bengali) population of the districts of Sylhet, Cachar, and Goalpara all consume ganja. The use of the drug is chiefly restricted to the lower and labouring classes, and when gentlemen do, as they occasionally do, use ganja, they do so secretly, there being some stigma of disrepute attached to the practice.

28. A moderate consumer will take, say, two chillums a day, say, $\frac{1}{4}$ tola, which would cost from three pice to two annas in different districts. An excessive consumer would get through at least twice as much.

29. Only tobacco is mixed with ganja.

30. The drug is usually consumed in company. It is much more usually consumed by men than women. I have never heard of children using it.

31. A friend of mine (a former Deputy Commissioner in this province) tried the effect of one pipe of ganja. He said that he had an extremely disagreeable sense of giddiness and oppression followed by violent headache. I believe this is the usual effect, but that it disappears at the second and third smoking. I do not think that the craving for ganja is so strong as, for instance, the opium habit. The possession of ganja is a much less rare jail offence in this province than the illicit possession of opium. Opium, on the other hand, is more portable.

32. In Sylhet the Vishnuvites use ganja at all their religious ceremonies. At the Bijoya Dasami and the Sivaratri its use is imperative. On other occasions it is optional, but the practice is common. A common mode of holding a ganja carousal is for a number of men to meet for a "Trinather Seba" (the worship of Mahadev). This involves chanting of hymns, beating of drums, and consumption of ganja during the live-long night. There is also an obscene puja called "Kishori Bhojan," in which both sexes take part. In this I believe ganja is used. But this rite is practised only by initiates, and with the utmost secrecy. It is said to be extremely indecent.

On the Sivaratri and Bijoya Dasami days many people who never touch ganja, bhang or charas at any other time take a little bhang or charas. In this case the rare indulgence does not seem to start a habit, but the great body of ganja-consumers are habitual consumers.

33. The hemp plant is not worshipped in Assam, so far as I know. The habitual (and open) use of ganja is restricted to the lower classes, and is so far disreputable.

34. It would be a very serious privation to all habitual consumers to deny them the use of the drug. But our experience in jails and lunatic asylums shows that the habit can be broken within walls. A man who has no sufficient strength of mind to abandon ganja is apt to have relapses. I have known cases of this kind.

35. To prohibit the importation of ganja from Rajshahi would be easy. The result would be the increased use of the wild ganja, which is said on doubtful authority to be less intoxicating. There would be enormous discontent. But in this matter Assam may be regarded as part of Bengal. If it is possible to prohibit the use of ganja in Eastern Bengal, then it is equally possible to do so in the precisely similar districts of Sylhet, Cachar, and Goalpara. If the immigrant population of Assam proper were to be deprived of their supply, the result undoubtedly would be an increased recourse to country spirits and opium. There are, of course, many other drugs available, such as dhatura.

36. I do not think that alcohol is taking the place of hemp. Hemp is still a much cheaper mode of getting intoxicated.

37 to 50. I would rather not answer these questions. I have my views as to the effect of ganja, but they are based on hearsay information, and the Commission will no doubt have full and complete details from medical men on these points.

51. The only habitual criminals in the province are the Musalman river dacoits of Sylhet, and foreigners of bad character in other districts. All, or nearly all, of these consume ganja habitually and to excess.

52. See above.

53. I have known of cases in which the immoderate use of ganja among tea-garden coolies has brought about insane and unreasonable jealousy, resulting in crimes of violence.

54. I cannot quote specific instances.

55. I know no instances.

56. I do not know.

57. Ganja and charas are rarely, if ever, eaten or drunk in this province. But see above.

58. Our excise administration of ganja follows that of Bengal. When our neighbour raises her duty, we raise ours. The only branch of administration as to which we have any doubt or difficulty is that which relates to the number of licensed shops. We have largely reduced the number of shops of late years, as will be seen from the accompanying tables. The one drawback to doing this is that we make the use of the wild hemp more difficult to detect. The more vendors, the more spies on the illicit use of ganja. Of late the police have bestirred themselves in investigating cases of the illicit use of the wild plant. But even to this day I have heard officers in charge of districts in which the plant runs riot declare that it is unknown to them. I cannot suggest any improve-

ment in the manner we administer the excise of ganja in Assam. Any improvement (including the heroic step of prohibiting the cultivation of hemp altogether) must come to us through Bengal.

60. Neither ganja nor charas are produced in Assam.

63. I have no improvement to suggest so far as this province is concerned.

64. None whatever.

65. We are gradually raising the duty on ganja, and will go on doing so till its retail price assimilates to that of opium and liquor (see Table B). I think that is all that can or should be done.

66. Table A seen with Table B shows the necessity of differential rates on the three different varieties of the drug. But this is a matter on which the Rajshahi authorities will be most competent to speak.

67. No objection.

68. Ganja is not consumed on the premises in Assam.

69. If objections are raised, they are carefully considered. As a rule, petitions for the opening of new shops are more common than petitions desiring the closing of existing shops.

70. Bhang, as I have already said above, is largely smuggled into the plains districts of this province. The district tables appended to Table B will show the number of prosecutions for such smuggling. But the practice is very common, and at such bazaars as Tharia, Jaintiapur, Bholaganj, which stand on semi-independent territory, a fairly large trade is done in the dried wild plant. Successful prosecutions make the trade unprofitable for a time, but it always revives, and, like the hemp weed itself, never quite dies out.

Oral evidence.

Question 1.—I am 18 years' service, all but three of which have been passed in Assam. I have had experience in all parts of the province—the hill tracts and the two valleys as well. I was only officiating as Excise Commissioner for three months.

Question 2.—I do not know of any importation of bhang specially so-called, nor do I know of its existence apart from ganja. The wild bhang always has the flowering head.

Question 3.—The wild hemp is commonly found in deserted homesteads and growing as a weed in gardens. I think it grows thus in all parts of the province. The existence of the wild plant in occupied land does not constitute a breach of the excise regulations. I think it might be allowed to grow provided there was no intention of using it as an intoxicant. The wild hill ganja is contraband under the Circular 28 of 1882, because it is supposed to be stronger than the wild hemp of the plains, and it is presumed that it would not be imported and bought except for use as an intoxicant. The latter is the only reason indicated in the circular. It is my personal opinion that the hill ganja is stronger than the wild ganja of the plains, because it is commonly brought to the bazaars and finds purchasers. I have also been told by natives that it is stronger. The special name I have given in answer to question 4 seems to indicate this. It is possible that its superior strength arises from the fact that it is cultivated. On the other hand, a good deal of it comes from the Khasi Hills, where I have never

heard that it is cultivated, and I think I should have heard of it if it had been the fact. I have no reason to suppose that the two plants differ botanically. I have not served for any long period in the Khasi Hills since 1882. I am not certain that I should know the wild or cultivated plant by sight even now, though I have often had the wild plant pointed out to me. It was first pointed out to me at a place at the foot of the Khasi Hills in 1881. I produce a specimen of bhang which was given to me on my way to this office. I enquired for it in a garden and the man produced it. It was growing as a weed. The man is an Assamese Hindu, one of my own chapparrassis and an opium-eater. I merely asked for a specimen of wild bhang. It is difficult to say if such growth as I have described interferes with the excise revenue. Coolies in tea-gardens might grow it, but they live as a rule in lines without any ground under their control on which they could grow it. Still, as I have said in my written answer to question 3, I think it must be consumed to the prejudice of excise ganja. I have found my own syces drying the herb, and I think they must have been doing it for their own consumption. I should not prosecute a man for having such plants in his compound unless it was clear he was cultivating it. Ordinarily, if I found weeding, watering, and digging about, I should prosecute; if not, not. If it were found in the garden of a Hindustani, there would be stronger ground for supposing it was being cultivated than if it were in the garden of an Assamese. The present rule permitting the growth of ganja for cattle medicine may be one reason for the consumption decreasing in spite of the fact that the immigrant population is largely increasing. I think it unsatisfactory, from the excise point of view, that this permission exists, and I cannot say whether the plant is required for cattle to such an extent as to render it undesirable to stop the permission. I know as a matter of common hearsay that it is used for cattle, but I cannot say how much. The idea is that the immigrant does not use it for his cattle but for smoking, and that the Assamese do not use the drug for smoking but do use it for their cattle. By Assamese I mean the inhabitants of the Assam Valley. The inhabitants of the other valley do smoke ganja; those of the Assamese districts of the Assam Valley rarely do so. The above remark does not apply to the Miris, who, as I said in answer to question 12, fence in the wild plant on a large scale for consumption and vend.

Question 6.—The garden I refer to in this answer was one owned by a Bengali, who, I do not think, was a consumer of bhang or ganja. He gave me the information in casual conversation, and I did not verify it by personal inspection. I dare say the owner did not endeavour very hard to eradicate the plant.

Question 11.—The prosecutions I refer to occurred in Sylhet where there are *prima facie* reasons for supposing the plant was grown for human consumption. I think the offenders admitted that the plants were grown from the seed of excise ganja.

Question 53.—The cases I refer to came before me in court. I do not think the record of the cases would show that ganja entered into them. I cannot at the moment recall the cases I had in my mind when I wrote the answer, but I must have been thinking of some cases. I do not remember how many cases there were nor anything about them.

Question 68.—The phrase “run riot” is a strong expression, but I believe the plant does grow commonly. I think it one of the weeds which commonly follow cultivation.

Question 65.—The standard of what is required to produce intoxication is what I had in my mind in this answer. Judged by this standard, ganja is still cheap as compared with alcohol and opium. I do not know what the physiological effects of opium are, but I know that it makes a man cheerful, and the native regards it as an intoxicant. I cannot say if the present excise rates on ganja have nearly raised the price of the drug to the standard. Apart from smuggling, I think it would be desirable to tax the drug up to the standard. The usual daily cost of an intoxicant to a habitual consumer would furnish a standard of comparison of the various drugs.

Question 68.—There is no rule against consumption on the premises.

Question 69.—I have never had complaints, as well as I remember, from a tea-planter regarding the location of a shop in his neighbourhood. A planter told me this morning that he was not aware that any of his coolies took ganja. The planters know the habit of their coolies if they drink. The point I wish to bring out is that the

habit of ganja-smoking does not obtrude itself on tea-planters.

Question 70.—Tharia, Jaintiapur, and Bhola-ganj are bazaars at the foot of the hills and in the tracts in which the excise regulations are enforced. I can give no estimate of the amount of trade at these places. I have not tried smuggling cases arising at those places myself, but I have heard of them. I was only in that charge for three months.

Excise Memorandum.—I think it might be possible to fix the price at which the wholesale dealers should sell to the retail dealers, but it would be difficult to carry out in practice, because one could not tell that the wholesale dealer abided by the fixed price. In my present district, where there is only one wholesale dealer, the retail dealers are of course in his hands, but where there are more wholesale dealers than one, competition would come in.

The experiment described in paragraph (m) of my Excise Memorandum was a temporary expedient for tiding over a difficulty, there being no wholesale vendor forthcoming. So far as I remember, the gola was taken over by Government and the ganja sold direct by Government to the retail dealer.

5. Evidence of MR. R. B. McCABE, Deputy Commissioner, Kamrup.

Oral evidence.

I joined the service in India in November 1876, and have served ever since in Assam in all parts of the province except the plain districts of the Surma Valley.

The Naga Hills, the Garo Hills, the Khasia Hills, and the Lushai Hills are British territory, except that some of the old chiefs retain their independence in the Khasia Hills as regards their civil powers. The hills are administered under special laws, and the excise system of the Assam province has not been fully extended to them. We do not interfere with the people of the hills as regards the growth and use of hemp, except when the excise arrangements of our plains districts would be likely to suffer. In the Naga and Khasia Hills our excise law is in force, though not strictly acted up to. In the Lushai Hills it is not in force. I am not sure about the Garo Hills. Any person from the plains buying the drug from hill-men either in the plains or the hills would be prosecuted and the seller also if caught. The reason for not fully extending the excise system is that the people are uncivilized, and we have not thought it desirable to enforce our excise laws upon them; nor, indeed, is it possible with our present establishment. In the Khasia Hills the system is more developed owing to the tract being more advanced than the other hills. The two shops in the Naga Hills are solely for the use of the troops and traders, and up to 1888 no hill-man was allowed to buy the drug. I believe this is still the case. In the Khasia Hills the shop at Shillong would be mainly for the use of foreigners; but the hill-men would not be prohibited from buying. The shop in the Jaintia Hills is probably at the head-quarters of the sub-division (Jawai) and established for foreigners. There are also foreigners, a regiment of frontier police, at Tura, the capital of the Garo Hills.

I have seen the hemp plant growing in every plains district in which I have been in the gardens attached to the *bastis*. The cultivation is illicit, and I always prosecuted when I discovered it. The cultivation consisted of one or two old plants which the people said were self-sown and untended. They never raised the plea that they were grown for cattle medicine, though they said the herb was useful to them for that purpose. They are not allowed to cultivate the plant even for cattle medicine. Circular No. 28 of 1882 does not justify such cultivation, as I have described, even for cattle; but it does justify the possession of the wild plant for the purpose.

In the plains districts I have seen the plant growing wild, but the places in which I saw it growing may have been sites of old habitations or settlements, and I am inclined to think that it does not grow apart from habitations, past or present, I having seen it occasionally, and only an odd plant at a time.

In the lower ranges of the Naga Hills, immediately bordering on the plains, my attention has frequently been called on the march to plants growing by the side of the track, and the inhabitants of the hills have often told me that in former days they had traded in it to the plains. It is not cultivated, so far as I have seen, in the hills either in fields or gardens. It is looked upon as a jungle product. The tracks lead through cultivation, present or past, which might show that the plant was connected with human habitation; but the Nagas have told me that they had not planted it, and that they took no trouble to cultivate it. I have not seen it in remote forests. I met one of the minor Rajas of Bhutan lately, and he told me that the plant grew freely in the lower ranges of his hills. I caught three Bhutias carrying the dried plant in their hands openly and offering it for sale, and I issued notice to the

border villages that the offence would be seriously punished in future.

No attempt has ever been made to exterminate the plant in the hills. In the plains any officer seeing a plant is, as a matter of fact, bound to cause it to be uprooted or to prosecute according as the plant is found in unoccupied or occupied land. There has been no organised attempt to exterminate the plant on unoccupied lands in the plains. I do not think such attempt is necessary, because the quantity of such growth is very small, and has a tendency to decrease as lands become occupied. There is practically no growth in occupied lands now. Penalties were necessary at first to make the people understand the law; but now the difficulty of concealing the plant and the existence of the prohibition are sufficient to prevent the growth.

I think that, upon the whole, there is more consumption by foreigners than by the Assamese in the six districts of the Assam Valley. In the Kamrup district there are few foreigners, and the majority of consumers are Assamese. The consumption of the current year will be higher than that of the last, owing to the influx of foreign labourers for the railway works, by some 11 maunds. The Bhutias smoke ganja extensively, as the Raja has told me, and his territory extends 200 miles along the frontier, and covers the lower ranges to a depth of three or four days' journey. I have never seen the people in the higher Naga Hills and the Lushai Hills smoke ganja. I have lived for years with these people and am sure that they do not use ganja. About the Naga tribes of Manipur, I can say that they do not use ganja, and they probably cover half of the territory. I cannot say anything about the Khasia and Garo Hills. I have had Khasia coolies who smoked ganja—one man out of 700 or 1,000 perhaps. In two years' expeditions I can only remember having to supply ganja to three or five smokers.

There is no religious feeling among the hill tribes about the drug. The Assamese present it at the temples of Mahadeo at Gauhati and Haja, 15 miles from Gauhati. The drug is presented both as "chat bhang" and "ghota bhang," that is, dry for smoking and liquid for drinking. These are temples where I know of the use. It is also observed in other temples of Mahadeo. I do not know of its being used at temples or festivals of other deities. The shopkeepers say that of their Assamese customers the best are the Brahmans, the most numerous the fishermen and boatmen.

I have not seen enough to connect the drugs with crime in any general way, and I can only give one instance in which a murder was committed by a man under the alleged influence of bhang. The man was a Nepalese, a sawyer. He had been working in the lower hills, and been away from civilization for several months. On his return to the plains he took bhang, and under the excitement caused by it cut down an inoffensive villager whom he had never met before and with whom he had no sort of quarrel whatever. I tried the case myself. The man pleaded he was under the influence of ganja and had not the faintest recollec-

tion of what he had done. I think he was hanged. The case occurred in 1889 or 1890, and the record must be with the Deputy Commissioner of Tezpur. The man had taken some alcoholic drink at the house of the man he killed. When he asked for more it was refused him, and he cut the man down. The taking of bhang was accused's plea in defence, and I cannot say if it was established by evidence. The whole facts can be ascertained from the record.*

The explanation of the wide range of retail price in different districts lies in the fact that retail vendors either compete or combine to keep up the price. The competition for retail licenses tends to raise the retail price of the drug; the competition in retailing tends in the opposite direction. In Gauhati the retail shops are mainly in the hands of the wholesale vendors, and the competition is really between the wholesale vendors, who have the whole business in their hands. There is no class of middlemen properly so called in this district. The high price in the Naga Hills is due to the special circumstances under which the shop is conducted. There is a constant passage of troops and coolies in connection with the road-making, and there is consequently a ready sale of the drug and competition for the shop is keen.

I should consider it an improvement to assimilate the ganja excise system to that of opium, that is to say, that Government should purchase and store the ganja and sell it to retail vendors at a fixed price. There would be risk of loss through damage to the ganja, but the prices bid for the shops would fully compensate for this. We should know more about the traffic and consumption, check adulteration, and ensure the quality of the drug. I do not think the closer association of Government with the traffic need be regarded as any obstacle to the charge. We should simply be establishing a firmer control over the traffic.

In this district no advantage would be gained by merely fixing the price at which the wholesale vendors should sell to the retail vendor, because there are enough wholesale vendors competing to keep the price from fluctuating.

* See appendix to Mr. McCabe's evidence.

Note by the Commission appended to MR. MCCABE'S evidence.

The records of the case have been destroyed, as the murderer was hanged. Three special police reports, however, have been traced, the first of which, written by Mr. W. B. Waller, then in charge of the District Police, contains a brief account of the case and abstract of evidence forthcoming. This report is dated 25th April 1889. The abstract of evidence shows that the accused was drunk with liquor at the time, and committed the murder in a drunken fray, of which the principal feature was that he demanded more drink (madb). There is no mention whatever of hemp in any form in any of the reports.

6. *Evidence of MR. R. S. GREENSHIELDS,* Deputy Commissioner, Lakhimpur.*

51. In this neighbourhood the Assamese proper are as a rule non-consumers of ganja. The ganja consumers are generally foreigners, and as a rule belong to the very lowest grades amongst such foreigners, and, as might be expected from their social position, they do furnish a considerable proportion of the bad characters of the neighbourhood. I do not consider that the moderate use of ganja exercises (more than any other intoxicant) any direct influence on the production of crimes.

52. I have known crimes of violence to be committed on little or no provocation by persons labouring under the peculiar delirium produced by a long continued course of ganja. In fact, people in this condition are in my opinion particularly dangerous, being extremely easily provoked to commit crimes of violence.

53. See answer to preceding question. Yes, most undoubtedly. Persons labouring under the peculiar delirium produced by the excessive use of ganja are particularly liable to commit manslaughter on little or no provocation. I have known more than one such case.

54. As a rule, ganja is not used by the Assamese for this purpose. Instances, however, have from time to time occurred where ganja has been used for this purpose by foreigners resident in Assam.

55. I have heard of such cases, but have not actually had experience of any. Complete stupefaction cannot be produced by ganja alone.

* Summoned to attend at a meeting of the Commission for oral examination, but unable to attend.

7. *Evidence of MR. P. H. O'BRIEN, Deputy Commissioner, Sylhet.*

51. I cannot answer.

52. I cannot answer.

53. I recollect a case of a murderous assault being committed by a person under the influence of ganja, but I cannot give particulars. I presume that excessive indulgence in these drugs does incite to unpremeditated crime, inasmuch as they appear to produce mania under such conditions.

54. I have heard of such a case, but never came across one personally.

55. I cannot answer.

56. I know nothing about any admixture. I never came across the use of dhatura except as a cattle poison in Tirhut.

8. *Evidence of MR. J. L. HERALD, Deputy Commissioner, Silchar, Cachar.*

1. I have had ten years' experience of district work—five in Bengal and five in Assam (Surma Valley).

I have asked the leading tea-planters in this district (182 tea gardens employing about 200,000 people), and reproduce replies given by them on various points. I have personally not studied the effects of ganja to any extent, but these planters notice its effect on their labour force.

2. Yes: (1) bhang; (2) charas, and (3) chipta, gol, and chur.

3. In Sylhet, and Cachar.

7. No.

13. Prohibited in the province of Assam, I believe.

14. No.

19. A drink is also prepared.

20. Almost all classes of Hindus contain instances of ganja consumers, but it is generally used to a large extent by lower castes and semi-aboriginal castes.

33. All classes regard the ganja consumer as a disgraceful character. The question "do you smoke ganja?" is frequently asked in cases in court with the object of casting discredit on the witness.

34. I do not think that a gana consumer must go on using ganja in the same way as an opium consumer. I do not think the privation, if justifiable, would be serious.

35.(a) Quite feasible.

(b) Very little.

(c) By penalty for possession.

(d) Probably.

(e) No.

(f) Probably opium and alcohol, as people must have some stimulant. The increased use of either opium or alcohol would be worse on society in general than the present use of ganja.

36. I do not think so.

37, 38, 39 and 40. Cannot say.

41. Some planters say it is used by some classes for (b) and (c), especially those who work in wet land and fishermen. Habitual use.

42. Garden doctors say that ganja users tend to become habituals, and that they are peculiarly liable to diseases of respiratory and circulatory organs.

43. Inoffensive, but they are generally ashamed of being known to use ganja and keep it as secret as possible.

44. Dr. Powell, M.B., of Káline Tea Estate, says:—

"I have had many cases of ganja intoxication under my care. The most striking feature as

compared with opium and alcohol is the frequent accompaniment of mania with homicidal or incendiary tendency. The prolonged use of ganja often produces a lasting mania or melancholia."

45. I do not think it causes bronchitis or asthma, but ganja consumers do not shake off these diseases as easily as others. See Dr. Powell's reply to last question. Dr. Dundee of Labac says:—

"I have noticed that confirmed ganja-eaters after a time become weak and debilitated, and are especially liable to get dysentery and also pneumonia. In the thoroughly drunken state I have noticed the eyes getting injected and the eater subject to fits of acute delirium, which in many cases I could understand would result in mania."

51. (a) Yes.

(b) None.

53. See Dr. Powell's reply to No. 44.

58. Working well.

63. I think the price of ganja wholesale might be raised to double its present rate gradually.

64. No.

65. I think duty on all excise articles might be raised to double their present amount without real hardship.

66. Yes; according to quality of ganja drug contained in each kind.

67. Not to mode of taxation; the amount might be gradually doubled.

69. Any objection raised to a site is carefully considered. Local opinion should be considered.

9. Evidence of MR. E. A. GAIT, Director of Land Records and Agriculture, Assam.

1. I have served for nine years in Assam, but cannot say that I have seen much of the ganja habit.

2. Bhang in Assam is generally understood to refer to the leaves of the uncultivated plant. The terms siddhi and subji are not used locally. I thought that flat ganja contained more leaves than round ganja, but cannot speak definitely.

3. All the districts of the Assam Valley.

4. Ganja is the only name I know for the cultivated variety, and bhang for the wild or uncultivated. The leaves of the latter are larger than those of the former.

6. Grows thickly in places, e.g., in the Mangaldai town.

7. No recognized cultivation. There is a certain amount of illicit cultivation chiefly for use as bhang.

10. No recognized cultivators in Assam—see answer to question No. 7.

12. My impression is that the wild plant is cultivated in the Assam Valley solely for use as bhang.

16. Yes. Bhang is prepared mainly from wild hemp. I have never heard of ganja or charas being prepared from the wild plant, but such cases, even if they occurred, would not often come to light. We detect (and prosecute) cases in which the wild plant has been cultivated; but I have never had a case before me in which ganja or charas has been manufactured from it.

19. Only for smoking, so far as I know.

20. I don't think much charas is consumed. Ganja is smoked mainly by foreigners, immigrants from Bengal and the North-Western Provinces. The indigenous inhabitants of the Assam Valley (including Goalpara) do not smoke ganja.

22. Foreign, from Rajshahi in Bengal.

23. Rarely.

24. Bhang is frequently drunk, mixed with milk and pepper, by youths of the Dom caste. I cannot say what proportion take it.

30. I should say that the consumption of all hemp drugs is almost entirely confined to the male sex, ganja and charas being taken by adults and bhang (as a drink) by adolescents.

31. Cannot say. It is very difficult to break off the ganja habit. I am not aware of there

being any marked tendency for the moderate habit to develop into the excessive.

33. Not much public opinion on the subject. No doubt abstention from all drugs and intoxicating drinks is looked upon as meritorious, just as are abstention from marriage and other forms of asceticism. But I do not think that the use of the drug in moderation is looked down upon.

34. I think it would be a serious privation; but have no special grounds for my opinion beyond that ganja-smokers find it hard to abandon the habit of their own free will, and that they would no doubt suffer equally if they were forced to abandon it.

35. (b) The drug would certainly be consumed illicitly. Lunatics in the Tezpur Asylum who were formerly ganja-smokers are frequently found to secrete wild ganja, and if they, with their scanty opportunities, are able to do so, still more would consumers whose movements are free be able to.

(d) Yes.

(e) Not in the Assam Valley, where the number of consumers is comparatively small.

(f) My impression is that it would in cases where wild ganja could not be procured. Such cases, however, would be rare.

36. The consumption of alcohol is, I fear, on the increase. But I cannot say whether it is being substituted for hemp drugs.

37. Charas is reported to be more powerful; but I have no personal knowledge.

42 and 43. The moderate use is certainly harmless. I have often had syces who smoked ganja; but they have never given any trouble in consequence, nor have they been in any way less fit for their work than abstainers from these drugs.

45. (b) No.

(c) No.

(d) Not that I know of.

(e) Not that I know of.

(f) Excessive use of any hemp drug is commonly supposed to produce insanity, but excessive use is rare. Apart from cases collected in asylums, only one case has come to my knowledge in which a man lost his mental knowledge in consequence of excessive ganja-smoking, and he only lost it (temporarily) when he got an opportunity

of smoking after several days of forced abstinence.

53. No personal knowledge of any case of the sort.

58. I consider it to be working well.

62. I doubt if it would be feasible, as the hemp grows wild luxuriantly in all parts of the Assam Valley.

63. No objection.

64. No objection.

65. I am not sufficiently acquainted with the comparative strength of each drug to say if the taxation on each is reasonable with reference to the others. We generally follow the lead of Bengal in fixing the price of flat and round ganja and of charas; but my impression is that the price now charged has a considerable effect on consumption, far greater than the effect produced by the taxation imposed on alcoholic drinks.

67. No.

Oral evidence.

Question 1.—I have nine years' service, the whole in Assam. I was appointed Director of Land Records and Agriculture last November. I know this district (Darrang) best of all, and have a fair knowledge of Gauhati and Nowgong. I know nothing about ganja in the hills or the Surma Valley, and little about it in the Assam Valley. My department keeps no statistics on the subject.

Question 3.—I have never found the spontaneous growth of hemp in the jungle, only in places formerly cultivated or still under cultivation. The jungle grass appears to choke it even when it grows.

Question 12.—What illicit cultivation there is is generally found in small patches in homesteads, and the excuse is generally made that the plant is self-sown, but sometimes it is admitted that the plant was cultivated as medicine for cattle. I can only remember one case in which cultivation was admitted, but I have a general impression that the admission has been made in other cases. The punishment that would be inflicted in a case in which the man admitted that he had cultivated the plant for his cattle would probably be a fine of about Rs 15. The plea would not be held to justify the cultivation, because cultivation is forbidden by law. The mere fact of the existence of the wild plant in cultivated or occupied land would raise no presumption of a breach of the law unless there were signs of cultivation or of attempt at concealment.

I have seen the wild plant in Kamrup, Darrang, Nowgong, and Sibsagar. I only saw it yesterday, for the first time in Sibsagar, where I have never been stationed. In the other districts I have frequently seen it. The plant, I should say, was common in these three districts. It is not found every day or every week, but can be found at once if it is sought for. When I was one day riding in the Mangaldai sub-division with Mr. Lyall he noticed the plants and asked me why I did not prosecute. I explained my reasons for thinking that the growth was not intentional. But nevertheless I did institute some 20 prosecutions in the course of the next few weeks and then desisted, finding there were so many cases. In prosecuting I

acted under Mr. Lyall's orders, which appeared to be based on the principle that allowing the plants to grow on private land constituted an infraction of the excise law by the occupant. I cannot say whether my views at the time coincided with Mr. Lyall's but, as I have said above, I do not hold that opinion now.

I do not know what amount of truth there is in the statement that hemp is useful as a cattle medicine. I cannot therefore say whether in the interests of the cattle a law rendering the existence of wild hemp in occupied land punishable would be oppressive. The excise revenue is probably affected to some small extent by the existence of wild hemp in occupied lands, but I have never heard of ganja being prepared from wild hemp in the three districts of which I am speaking.

Question 20.—The Doms are in the habit of using the leaves of the wild hemp to make a beverage on occasions. I know of no other class of Assamese which uses the wild hemp. So far as my experience goes, it is very rare indeed to find the Assamese taking hemp at all. The consumption of a district depends on the number of foreigners in it. The Assamese of these districts take opium principally and the hill tribes take spirits. In respect of these people, therefore, there would be no hardship in prohibiting the drug.

I know of no other class using bhang on the Sivratra except the Doms. It was in 1886 or 1887 that I was informed of this use by a man who is now a Tahsildar. Apart from this, I have no information, except that I probably verified the information given to me by some enquiry. As far as I know, ganja itself is used by no class of the Assamese. As regards foreigners, I have occasionally had to deal as a Magistrate with cases of violence alleged to have arisen from the use of ganja. Besides these cases and that of a syce who went melancholy from the drug I have no knowledge of the use of the drug by foreigners. I of course know that the ganja shops are principally maintained by the foreigners, because I have had occasion to make enquiries in connection with locating and inspecting shops, and they are generally placed near tea gardens. I do not think I have ever heard that ganja is chiefly consumed by the labouring classes. I have never made any study of the subject.

I know of no shop located in the midst of the purely indigenous population of Assamese or hill people in the districts of which I am speaking.

Two subsequent letters from MR. GAIT, published as appendices to his evidence.

Since giving evidence *re* ganja, I have been taking a little interest in the matter, and should like to modify my statement by saying that wild ganja is often taken in the form of bhang by old men, who like the feeling of exhilaration which the drug produces. Its use is not (as I thought) confined to youths of the Dom caste. The Tahsildar of Nabbari, moreover, tells me that younger people who are smokers smoke the uncultivated variety if they run short of, or are unable to afford to purchase, excise ganja.

This morning I saw a sipahi, named Bam Sarat, of the Parbutia Gosain, who had been collecting tithes in Nomati mauza, returning with a large

bunch of ganja, which he told me he was taking as a present to the Parbutia Gosain. I am told the said Gosain drinks a decoction of bhang nightly. I dare say you know all this, but my statement before the Commission went rather against the view that wild ganja in any form is used by Assamese, other than Doms, and so it seems as well to take an early opportunity of modifying what I said; not, however, that my statement went for much, because, as I told the Commissioners, I have never made any study of the subject, and do not profess to know anything about it.

I hear Mr. McCabe says that he stops the cultivation of wild ganja. It is growing luxu-

riantly all round the Kamalpur rest-house, and within a mile of the one at Tambulpur, which are two of the four camps I have stayed in since I entered this district.

After writing to you I saw two more patches of ganja—one a small patch on the Hajo-Nalbari road, and the other a flourishing stretch of it for quarter of a mile along a village road in Saniadi-gaon in Hajo Mauza.

I am beginning to think that, if properly looked for, it would be found in almost every village in Kamrup. Moreover, all that I have seen so far has been in, or close to, *basti* land, which makes me begin to think that, if not actually planted, it is very actively tolerated.

10. Evidence of MR. G. GORDON, Deputy Commissioner, Goalpara.

1. Have served in Assam in different districts since December 1885.

2. Ganja is imported from Bengal, and is distinguished as flat, round, and chur.

3. It is common in Kamrup.

7. No.

12. No.

20. Mostly foreigners, such as what are known as Bengali coolies.

40. Wild ganja plants are used for the treatment of cattle.

42. I have known habitual consumers who do not seem to suffer in any way.

43. Yes.

45. I have known a few cases of insanity attributed by medical men to the excessive use of ganja.

51 and 52. I do not know that any large proportion of bad characters are habitual consumers of the drugs. Ganja is not allowed in jails to habitual consumers in the same way as opium. I do not know that there is any connection between these drugs and crime.

53. I have not personally witnessed unprompted crime or homicidal frenzy induced by the use of hemp drugs.

54. I do not know, and have never heard, that criminals use these drugs to fortify themselves for dangerous crimes.

55. The administering of hemp drugs for the first time will cause complete stupefaction, but I have not heard of their being used by criminals for this purpose.

58. I have no fault to find with it.

64. No.

67. No.

Oral evidence.

I came to India in December 1885 and have been in Assam since. I have served in Gauhati, Sibsagar, Nowgong and Goalpara, all in the Assam Valley. I have never served in any hill district.

Question 3.—Kamrup is in the Gauhati district. I have known cases of prosecution there. I do not know the plant myself. I have never looked for it. I have no knowledge of any cultivation apart from what I know of prosecutions. I have not (so far as I know) seen any cultivation. The prosecution in one case was for gathering it on a

river *chur*. It therefore grows there. But I cannot say to what extent.

Question 7.—There is no cultivation permitted. I believe there is not much cultivation. I have known men prosecuted for having one plant or two plants in their gardens. What was believed was that these plants were from seed of the imported ganja. I know nothing of cultivation apart from these prosecutions. I have heard (*vide* answer 40) the defence set up that the plant is used for cattle. This is not held to be a valid defence. I have heard elsewhere that it is so used. So far as I remember, I have never had my attention called to paragraph 4 of Circular No. 28 of 26th October 1882. It has never been adduced in defence. I have never allowed this defence about cattle as a valid defence. I think that this circular, which issued before I came to India, must surely have been cancelled. The prohibition of cultivation and possession is strictly enforced by prosecutions.

Question 20.—I here refer to the coolies brought in for tea gardens and other labour. It is said that they are great consumers of the drug. About fifteen thousand come in a year, I think. I have heard so often from different sources that they take ganja that I believe this. I cannot say for certain that Assamese labourers do not take ganja. But I believe that they take opium much more than ganja. I speak of the true Assamese. The people in this (Goalpara) district are not pure Assamese. We have a very mixed population.

Question 51.—Opium is only allowed in jail when the Civil Surgeon thinks a man must get it. Ganja is never allowed. I have heard of its being allowed. I believe ganja could not be given. As ganja is not allowed, we never know whether a man is a consumer. There is no necessity to inquire.

Question 55.—I have not seen cases of complete stupefaction; but my Court Inspector and other people have told me that ganja would cause it on the first occasion of administration.

Question 70.—I never heard of the import of hemp from Bhutan. I have no reason to suppose that it is imported. The Goalpara and Kamrup districts border on Bhutan. Opium is, I know, supposed to be smuggled into the province, but I have never seen it, except from the neighbouring districts of Bengal, where the duty is lower. I do not believe that ganja is smuggled. The Kacharis do not, I believe, use ganja; they use rice beer.

11. *Evidence of CAPTAIN A. E. WOODS, Officiating Deputy Commissioner, Naga Hills.*

51. Not in this district. Most of our bad characters do not use drugs at all. No connection with crime in this district.

52. No experience of any excessive use of drugs in this district.

53. Cannot say, as there is no excessive indulgence in drugs in the district. No.

54. Certainly not in this district. In other parts of India doubtless in some cases they are used for that purpose. Sepoys often before running amok drug themselves.

55. (a) Have never come across a case of it.

(b) Cannot say, having never tried it.

12. *Evidence of MR. C. W. E. PITTAR, Officiating Deputy Commissioner of Kamrup.*

1. Such slight information as I have on the subject has been obtained by conversation with native gentlemen in a position to know facts about the use and effects of the drug, and by questioning one or two ganja-smokers who were willing to give information.

It is therefore with the greatest diffidence I offer my opinions and have accordingly confined my replies to the questions in Chapter V and a few in Chapter VI, neglecting other chapters as relating to matters of which I have not sufficient experience or about which such information, as I have obtained, is not wide enough in its range to carry weight.

19. Ganja is only used here for smoking. Charas is scarcely known.

20. The poorest classes both in towns and in the interior.

21. All kinds are in demand.

22. From Rajshahi.

23. Used but so seldom as to be inconsiderable.

24. There are no regular consumers.

26. Mostly habitual moderate consumers.

28. (a) One or two pice worth, representing about the one-sixteenth or one-eighth of a tola.

(b) Four pice worth or $\frac{1}{4}$ tola.

29. Chiefly tobacco. It is said that ganja mixed with tobacco becomes deleterious, is more intoxicating and has after-effects, while pure ganja has no after-effect. Smokers, however, say tobacco makes the preparation milder.

30. Smoking ganja is ordinarily practised in solitude but often in company. Smokers sometimes have a sort of partnership in their ganja and smoke together from the same pipe. It is mainly confined to the male sex. Children do not smoke.

31. The habit of smoking is easily formed after the first experience. It is easy for moderate consumers to break off the habit. An excessive consumer informed me he had once left off the habit and taken to it again. An excessive consumer feels rheumatic pains for a period and requires medicine, but otherwise the habit can be given up without much difficulty.

32. A little siddhi is drunk by the better classes on the last day of the Durga Puja for its cheering effect; this does not lead to the habit. Women drink it on this occasion.

33. Eating and drinking are not thought much of. Smoking is considered vulgar.

34. It would; for this reason that not only they but non-smokers look upon the habit as

harmless. Smokers themselves firmly believe that they work better when under the influence of the drug.

35. It would be very difficult and the drug would probably be obtained from the hills. The discontent would not amount to a political danger as the class affected are not powerful. Professional agitators might perhaps make capital of it.

36. No; the relative price of alcohol and ganja will affect their consumption. Ganja-smokers sometimes indulge in liquor as a treat.

37. Charas is said to be more intoxicating.

38. They are said to be less intoxicating and generally less harmful in the order named.

39. Smoking is considered more injurious than the preparations that are drunk here.

42. I have known ganja-smokers whom I never suspected of being addicted to the habit until I found them out. I cannot say what the effect would be in such cases in the long run.

43. Yes.

44. The drink is said to be refreshing and exhilarating. Smoking induces a kind of intoxication which is not so much marked in old consumers. I saw two men smoke an anna's worth of ganja together. The one who smoked the larger share of the pipe, admitted that his vision was slightly affected. There was nothing particular in his appearance to indicate intoxication.

I have gathered from smokers and others, who have tried the drug, as siddhi, through curiosity, that the effects resemble to some extent those of alcohol in so far as they tend to bring out a man's real character.

The moderate use of the drug is not supposed to be more harmful than the moderate use of alcohol.

46. The excessive use is not supposed to have the same ill after-effects as alcohol when used in excess.

47. No.

51 and 52. In my experience as a Magistrate, I cannot recall a single case in which it was suggested that there was any connection between either the moderate or excessive use of the drug and a particular crime. I have not therefore had occasion to enquire how far bad characters coming before my notice were ganja-smokers.

53. I cannot cite any instance, but I can imagine it doing so in the same way as excess of alcohol in an individual of a naturally violent temperament, but not in a peaceful subject.

54. Not in my experience.

55. Not in my experience.

13. Evidence of ISHAN CHANDRA PATRANAVISH, Bengali, Brahmin, Extra Assistant Commissioner, Sylhet.

1. In my official capacity as Extra Assistant Commissioner in charge of the Excise Department of the district, I have to deal with matters connected with hemp drugs.

2. Hemp plants are not cultivated in this district. In some places, however, a species of plant grows spontaneously, which is called bhang and which never produces ganja of any description. Ganja is imported from Rajshahi in Bengal, and the description given in the question of the three several kinds is the description of the kinds of ganja brought here for consumption, and they are known and sold by these very same names.

3. I have no knowledge of any other districts of this province than Sylhet in regard to the spontaneous growth of hemp plants. In Sylhet, ganja plants are not known to grow spontaneously; but, as I have stated above, a plant called bhang, perhaps of the same species with the hemp plants, grows spontaneously in some parts, but nowhere abundantly. In the Khasi Hills, however, I understand ganja plants grow wild; but their quality, I am told, is inferior to that of those imported from Rajshahi.

4. Bhang is known as bhang all over the district.

5. It appears that a moist kind of land is more congenial to the growth of bhang plants.

6. Growth of bhang seems to be scattered.

7. No.

11. I do not know.

12. No.

13. No.

14. No.

16. Bhang from bhang plants is sometimes prepared, but not generally, and only for the purpose of drinking as a medicine in bowel complaints. On the Sarswati (goddess of learning) Puja day some people also drink a preparation of this drug, called "ghuta" or siddhi, or eat a preparation called "laddu;" but the practice is gradually going out of use. The method of preparation is very simple. Some leaves of the plant are crushed and mixed with milk and sugar or sugar and water and then drunk. "Laddus" are made of leaves and gur boiled together and made into small balls. The preparation for medicinal purposes consists only of crushed leaves and powdered black pepper mixed with water.

18. Yes, ganja deteriorates by keeping. It begins to lose its effect after one year's keeping. After two years it is not at all sought for. It keeps good up to one year with ordinary care. The cause of its deterioration is dryness on account of exposure and long keeping, making the agglutinated flower tops drop off. This causes the loss of its intoxicating power and makes its smell bad. To prevent deterioration it is kept in wooden warehouses or golas lined with tin in bundles wrapped up in straw and gunny.

19. Charas is not used in this district. Ganja is only used for smoking.

20. The people of lower classes, generally such as charal, zugli, patni, tea-garden coolies, sweepers, malis, dhobas, dhulis, etc., and fakirs and sanyasis or mendicants smoke ganja. Some people of other

classes also sometimes smoke this drug; but their number is very limited. Ganja-smoking is not confined to any particular locality of the district. I am unable to say what proportion of the people smoke ganja.

21. Mostly flat ganja is smoked here.

23. No; so far as I know.

24. The residents of the district, as I have already said in my answer to question No. 16, only drink this drug for medicinal purposes, and sometimes eat it also, making a preparation of it with gur (called "laru") on Sripanchami Puja days. But the use of neither of these can be said to be universal. When the residents of the district use bhang, they use the stuff grown here. But the up-country men, such as Deswalis and Kayans, generally use the bhang, which they get from Calcutta. This is a better stuff, and is grown in upper provinces. The up-country men questioned by me say that the bhang which grows here is stronger than the stuff which they get from Calcutta, and its leaves also are bigger than those of the bhang which grow in upper provinces.

25. I give below the quantities of ganja sold in this district during the last three years—

			Mds.	Srs.	Chts.
1890-91	.	.	360	22	4½
1891-92	.	.	350	7	10
1892-93	.	.	334	23	10½

The above shows that the use of the drug is on the decrease, which, it seems to me, is due partly to the enhancement of duty and license fees and partly to dearness of food-grains and other attendant circumstances.

26. I am unable to answer this question satisfactorily; but I suppose the number of habitual excessive consumers of ganja is not large in this district.

27. The classes from which the consumers of ganja come have already been stated in answer No. 20. The other part of the question I cannot quite answer. The mendicants almost as a class use ganja.

28. So far as I can ascertain, a habitual moderate consumer consumes on an average half a katcha of ganja per diem, cost one anna and nine pies, and a habitual excessive consumer on an average about one katcha or a little more of ganja per diem, cost three or four annas.

29. When preparing the ganja for the chillum, a small quantity of tobacco leaf is mixed with it, for the purpose of flavour it seems. I am not aware of any bhang massala being sold here.

30. The tendency is to smoke ganja in company rather than in solitude. Yes; it is confined to the male sex, not to any particular time of life; but children do not, as a rule, smoke ganja.

31. Yes; it seems that the habit of smoking ganja is easily formed by association. It seems to be difficult to break off the habit when once formed. Generally moderate smoking of ganja leads to excessive smoking.

32. There does not seem to be any particular custom, social or religious, in regard to the consumption of ganja. I am not aware of any particular religious custom in which ganja is essential.

But in Siva Puja some few people use ganja. A puja has, however, sprung up in recent years among the lower classes of people, which is called "Trinather Seva," in which ganja is said to be essential. But it is a puja for which, so far as I know, there is no Shastric injunction. This puja, I am afraid, is likely to lead to the habit or prove injurious.

33. The consumption of neither of these drugs is regarded with favour by the public. The consumers in consequence always observe secrecy in using them. I am not aware of any public opinion based on religion in favour of the practice. I think that the use of all the forms of narcotic is generally in disrepute owing to their injurious effect, real or supposed. Nowhere in this district, so far as I am aware, the hemp plant is worshipped on any occasion by any section of the people.

34. The mendicant class and those of other classes who have acquired a regular habit will, I am afraid, consider it a serious privation to forego the consumption of ganja. The reasons are obvious. I am unable to give any idea of the probable numbers of these classes.

35. It would not, I suppose, be feasible to prohibit the use of all of these drugs. A total prohibition would, I think, tend to provoke attempts at illicit consumption. If ganja is allowed to be used, the use of its other forms may be done away with. Total prohibition will, at least in the beginning, occasion great discontent among the consumers; but I do not for a moment think that it will amount to anything like a political danger. It does not seem to me probable that the prohibition of the use of the narcotic will be followed by a recourse to alcoholic stimulants, but will, I am afraid, lead to the use of other drugs.

36. No.

37. I cannot say. It is not used here.

38. No; so far as I know.

39. Ganja is only smoked here, and I am not aware that it is drunk or eaten in any form.

40. The bhang, so far as I know, is prescribed by kabirajes in cases of diarrhoea. I do not know whether any of these drugs is used in the treatment of cattle-disease.

41. (a) I do not know.

(b) It is said to do so.

(c) I do not know.

(d) I am not aware of.

The labouring classes are said to use ganja to alleviate fatigue. I refer to moderate occasional use of the drug. I am not able to give any information as to the proportion of the consumers.

43. Yes.

44. It is said to be refreshing. Ganja does produce intoxication. I do not think ganja does

allay hunger. Bhang is to excite appetite. I cannot say how long the effect lasts. Neither can I say whether there are any after-effects. Want of gratification is said to produce longing or uneasiness.

45. (a) Not to any appreciable extent.

(b) It seems it does to a certain extent.

(c) Long use seems to injure the digestive power.

(d) It does, it is said.

(e) I cannot say.

(f) Excessive use is said by some to produce insanity. I cannot answer more than this.

46. See my answer to question No. 45.

47 and 48. No.

49 and 50. I cannot answer.

51. Bad characters do to a certain extent use ganja I am told. Thieves are said to use it to keep themselves warm and protect themselves from the effects of exposure.

53. Sometimes it seems to do.

54. I might have heard one or two instances in which excessive indulgence in ganja was set up as a plea for committal of crime; but I cannot recollect now any particular instances of it.

55. I cannot say.

56. I do not know.

57. I do not know that these are either eaten or drunk.

58. I think it is working well.

62. No; I do not think it is necessary here. Bhang is not cultivated in this district.

63. No.

64. No.

65. Bhang and charas are not in use here. In my opinion the taxation of ganja is not up to time unreasonable, with reference to alcoholic or other intoxicants, so far as this district is concerned.

66. Our supply comes from Bengal alone, and there are different rates of taxation for the different kinds of ganja brought therefrom, our rates being fixed by the Commissioner of Excise, Assam, with the approval of Government.

67. No.

68. No; not in this district.

69. Yes; when an application is received for a new shop, the police are required to report when necessary. No new shop can be opened without previous sanction of the Excise Commissioner. Yes; I think local public opinion ought to be considered.

70. No such importation; but hill ganja is sometimes smuggled from the Khasi and Jaintia Hills and Hill Tippera. Care is taken for detection, and, when detected, offenders are punished.

14. Evidence of Mr. I. H. W. DALRYMPLE-CLARK, District Superintendent of Police, Sibsagar.

1. Twenty years' service in India.

51. I do not think that any large proportion of bad characters are habitual moderate consumers; neither in my opinion has the moderate use any connection whatever with crime in general or with crime of any special character.

52. Ganja is the drug almost invariably used by real bad characters, and is generally used by such in excess when about to commit heinous crime and crime with violence. Bad characters habitually use it to excess in order to give themselves Dutch courage. The excessive use of ganja

more often than not leads to crime amongst the lower classes.

53. Most certainly it does. I know of many for each of my twenty years' service. I can quote several during the three months I have held charge of this district.

54. Yes, more often than not, but more especially to fortify themselves to commit premeditated crime with violence, such as dacoity, highway robbery, rioting, murder, etc., etc.

55. Very seldom indeed, if ever, with these drugs alone, but sometimes with them mixed with dhatura for instance. Complete stupefaction can be induced, I believe, without admixture.

Oral evidence.

Question 1.—I have been in the service a little over twenty years. I have served in Bengal, Behar and Orissa, and something less than two years in Civil employ in Assam.

Question 52.—My answer is based on general experience and cases which have come before me in Bengal and Assam. I cannot quote any Bengal cases. My opinion is a general impression which I have gained during my service. I have never paid the slightest attention to ganja, but ganja is the only drug which I have ever heard connected with crime as an incentive in this country. In this remark I did not refer to liquor; but I am of opinion that ganja is more used by the criminal classes than liquor, and therefore has more connection with crime. The excitement arising from ganja often leads a man to commit crimes of violence.

Question 53.—I can quote cases which have occurred in Assam. One is that referred to by Dr. Mullane which occurred at Dumduma. The enquiry made by the Superintendent Police Officer showed, as far as I remember, that a man under the influence of ganja ran "amok" and wounded about seven people. This was in 1890 or 1891. I cannot say what the result of the trial was, except that I think the man was convicted. I cannot say if the fact of the man having taken ganja was brought out in the trial. Such a fact very seldom comes out. It is a matter for the defence. As far as I remember, there was no motive alleged. The case was tried at Dibrugarh, but in what Court I do not remember. The police enquiry and the manager of the garden all informed me that the man acted under the influence of ganja. I cannot say whether he was an habitual smoker, nor whether he was an excessive or a moderate smoker. He must have smoked to excess on this occasion. The case came to me in the usual routine way. This was the sort of case in which the facts connected with ganja must have come out. I should not think it proper to keep back such facts because they told in favour of the accused. I was not in Court on this occasion, but the facts must have come out, I should think.

I have had the records of several cases examined in which offences were committed by ganja-smokers, and, according to my belief, under the influence of ganja. But the facts connected with ganja do not appear on the records. When the Commission's questions came to me, I examined the records of the chief cases of violent crime that had occurred within the year. I spoke to the investigating

officers about these cases as opportunity offered telling them what my object was. My exact procedure was this. I called up my head-quarter Inspector and had a talk with him about the cases of violent crime for the district in the year. Out of these cases I selected some in consultation with him as ganja cases. Of these, some had occurred in my own time; and in respect to those which had occurred before my time the selection was based on the views of the head-quarter Inspector as accepted by me after questioning him. Afterwards I talked over some of these cases with the investigating officers. This I did after despatching my answers to the Commission, and in order to test the answer I had given, in other words, to compare my Bengal experience with Assam. I returned from leave in June last, and my paper was written on 20th October.

In two* of the cases I found facts in the record tending to show that the offenders were ganja-smokers. In the other five cases such facts were wanting. I cannot say that I found in any of the seven cases evidence that the offences were actually committed under the influence of ganja.

In Bartola Station case No. 4 of September 1893, Birbal and Ahalu coolies, son and father, were convicted of murdering a girl, the daughter of the latter and the sister of the former. I suspected the father of having murdered two other people and I interviewed the prisoners in the jail both before and after the High Court had confirmed the sentence of death upon them. The father denied every thing, but the son shortly before he was hanged, while still pretending that he himself was innocent, told me that he and his father were both ganja-smokers, that on the night when the girl was murdered they had both smoked heavily, and that if he had helped in the murder, he had done it under the intoxication of ganja and knew nothing about it. He had given up all hope of avoiding punishment when he told me this. I think this worthy of credence though it was not urged at the trial. The only motive I could find for the murder was to get the girl's husband into trouble. They put the body by his house.

The examination of the cases was subsequent to my answering the Commission's questions 51 to 54. I then stated my general impressions on a subject on which I do not know very much. If I had expected an examination into details, I should have been more careful in my written answers though I still hold the opinion which I then expressed. I should not have given my opinion in such general terms.

Note by the Commission appended to MR. DALRYMPLE-CLARK'S evidence.

The records of the two cases quoted in the margin of Answer No. 53 were sent for.

1. Golaghat case No. 7.

In this case one Krishnaram was smoking ganja with five other men, when one of them offered to sell him ganja. He agreed to buy, but differed about the price. A quarrel ensued, in the course of which he said he would take the ganja to the Police thanna. On this, they beat

him. He called out; and his father came up. In the subsequent fight, the father had his arm broken. The man that struck that blow was sent to jail for three months: the others were fined. There was no evidence that the men were intoxicated or that they had been smoking to excess.

2. Bartola case No. 9.

In this case, the accused Latua, a garden coolie, branded his wife, pursued her and her mother (who lived next door), and then attempted suicide by hanging. His plea was, that his wife was unfaithful. The woman and her father

stated that he was constantly beating and ill-treating her, and charging her with unfaithfulness, though naming no particular person. She was a girl of 15 who had just reached puberty after being married to this man for four years.

Ganja was not mentioned as the cause of the offence; but the Jemadar who cut the man down said: "Accused is a ganja-smoker and takes liquor also. I had got smell of ganja in accused's mouth when I reached the rope from his neck." A fellow coolie says: "Accused is a very bad man. He has got a very bad temper.** Accused smokes ganja, but not much or too frequently." No other witness was asked about ganja or mentioned it.

15. *Evidence of MR. J. RIVETT-CARNAC, District Superintendent of Police, Cachar.*

51. I have no reason to think that the proportion of habitual moderate consumers of ganja is larger among the criminal classes than any other class.

I believe that the moderate use of ganja has no connection with crime.

52. I should say that the excessive use of ganja is proportionately more common among persons of bad livelihood than among the law-abiding class. It is a fact that the term ganja-smoker (in the sense of an excessive indulger) has come to be regarded as synonymous in police usage with bad character.

53. I have a distinct impression that excessive

indulgence in ganja does excite to unpremeditated violent crime. I cannot call to mind at present any particular instance of this, but I am pretty certain that I have met with several cases in the course of my 16 odd years' experience as a police officer.

54. I think not.

55. Ganja by itself is, I believe, not so used and would not, I think, cause complete stupefaction. I have an impression that bhang is occasionally used by professional poisoners, but the proportion of cases in which any of the hemp drugs or admixtures thereof were used for these purposes would be small compared with those in which, say, dhatura, for instance, was used.

16. *Evidence of MR. E. MUSPRATT, District Superintendent of Police, Lakhimpur.*

51. I think a very small proportion of bad characters take any of these drugs. The moderate consumption of these drugs has no connection with crime at all.

52. The excessive use of these drugs has no connection with crime.

53. The excessive use of bhang does occasionally incite to violent unpremeditated crime; but such cases are very much fewer in number than those caused by excessive drinking of intoxicating liquors.

54. I can call to mind no such case.

17. *Evidence of MR. W. D. ABERCROMBIE, District Superintendent of Police, Sylhet.*

51. The large proportion of bad characters are not ganja consumers. Ganja has no connection with crime.

52. When a man is convicted of an offence, I have heard it said "Oh, he was a ganja-smoker," as people often give as a reason for crime committed in England "he was a drunkard." But

how many people are there who smoke ganja or drink who are not criminals?

53. None.

54. No.

55. No; dhatura is used in such cases. I know of no such case.

18. *Evidence of MR. E. C. S. BAKER, District Superintendent of Police, Cachar Hills.*

51. There are very few villages in these hills which use siddhi or bhang, and then only in very small quantities. None.

52. Excessive use unknown in North Cachar.

53, 54 and 55. No.

19. *Evidence of* SURGEON-MAJOR J. MULLANE, *Civil Surgeon, Dibrugarh.*

1. Observations on the prisoners committed to prison in the Gauhati Jail extending over a period of seven years.

3. In the Kamrup district the hemp plant springs up spontaneously in almost every patch of cultivated ground.

4. This ganja was simply called jungly ganja.

6. Dense.

7. No.

16. The wild plant is commonly used as an intoxicant by those who cannot afford to purchase the cultivated article.

40. Yes. Native physicians prescribe ganja. I have frequently seen the wild plant being dried on the roofs of native houses and on questioning the inhabitants was informed that it was intended as a medicine for cattle.

41. (a) No.

(b) Yes. The use of ganja enables the consumers to withstand severe exertion and exposure.

(d) Its continued use wards off sleep.

43. Yes, moderate consumers are inoffensive to their neighbours.

45. During my experience as a Jail Superintendent, cases have frequently been sent to me as dangerous lunatics (to be passed on in due course to the lunatic asylum). Such lunacy being the result of the long-continued and excessive use of ganja, these cases invariably recover in Jail within ten days. This variety of delirium is generally of a noisy, violent character, the patient being much exhilarated. I never knew of any other treatment than total deprivation of the drug having been tried; this, however, was uniformly successful.

Among natives there is a widespread belief that the mortality among ganja consumers from bowel complaints is heavy.

51. In this neighbourhood the Assamese proper are, as a rule, non-consumers of ganja. The ganja consumers are generally foreigners and, as a rule, belong to the very lowest grades amongst such foreigners, and, as might be expected from their social position, they do furnish a considerable proportion of the bad characters of the neighbourhood. I do not consider that the moderate use of ganja exercises (more than any other intoxicant) any direct influence on the production of crime.

52. I have known crimes of violence to be committed on little or no provocation by persons labouring under the peculiar delirium produced by a long-continued course of ganja. In fact people in this condition are, in my opinion, particularly dangerous, being extremely easily provoked to commit crimes of violence.

53. See answer to preceding question. Yes, most undoubtedly. Persons labouring under the peculiar delirium produced by the excessive use of ganja are particularly liable to commit manslaughter on little or no provocation. I have known more than one such case.

54. As a rule ganja is not used by the Assamese for this purpose. Instances, however, have from time to time occurred where ganja has been used for this purpose by foreigners, resident in Assam.

55. No. Complete stupefaction cannot be produced by ganja alone.

Oral evidence.

I have been nearly seventeen years in India. I was four years in military employ (generally combined with civil in the Punjab), and have been thirteen years in the plains districts of the Assam Valley. I have had no experience of insanity, except the jail work in India, and six months in a District Asylum in Ireland. I have not specially studied insanity.

Question 16.—My grounds for this statement: I was asked by Mr. (Sir) Charles Elliott, Chief Commissioner, to make some experiments in 1884 in the Gauhati Jail to ascertain whether the wild ganja was ever consumed by the people. There were then four or five confessed ganja consumers in the jail, all foreigners, *i.e.*, not Assamese. I gave them only wild ganja to smoke and to drink, and some would chew it. They all smoked it, and were very glad to get it. I picked the wild plant myself in the villages. I pressed it between sheets of blotting paper like botanical specimens, and they got this. It was about the beginning of the hot weather. The plants were flowering. I also questioned the men. They said they much preferred the cultivated article, as the intoxicating effect was not so great in the wild plant; but they said they were glad to get the latter when they could not get the cultivated plant. I wrote out a slip for Mr. Elliott on the subject, giving him all the information—not in the form of a report—and sent it to him.

I remember where the plants were got. The plant is found in old cultivation almost invariably. But I have seen it growing in places almost two miles away from the nearest house. It is in Dibrugarh, Kamrup, and Goalpara, the three districts where I have served.

I have seen the wild drug used myself outside, dried and smoked, but only by the very poor. They were all people who knew me well, and knew that it was none of my business to bring them to justice.

Question 45.—I myself know of no case of permanent insanity produced by ganja. I know of one case in which ganja was alleged as the cause, and not improbably it was the cause. But I could not certify to that as the sole cause. This man was sent to the Tezpur Asylum some three or four months ago.

The temporary cases I describe in my answer are attributed to ganja, because the police reports described the men as ganja-eaters, and they themselves confessed it while in jail. The violent delirium in hemp cases differs from the delirium due to other causes. Some jailors can infallibly tell you what is a ganja case. The ganja patient has a very high idea of himself. He is somebody very great or very sacred, far and away removed beyond ordinary people. This is the one symptom I found always constant in these cases. There were no after-symptoms that I noticed, except very violent, very excited, and generally a dangerous class of persons to deal with. As a rule, these symptoms do not occur in insanity due to other causes. In other cases, the insanity assumes nearly always the form of depression. I think that the short duration of the cases is a

diagnostic mark of hemp drug insanity. If I had a case of these symptoms and a short duration and no ganja history, I should in this country be very slow to believe that it was not due to ganja. I should regard these symptoms as proof positive that it was ganja intoxication.

I call it intoxication for want of a better word. It is more like delirium tremens and produced in the same way, only the character of the peculiar insanity being different. I believe that permanent lesions occur in ganja as with alcohol; but it has not fallen to my lot to have any proof of this placed before me. I think there must be permanent lesions, because that condition of things could not, in my opinion, be frequently produced in the human brain without producing permanent lesions.

Question 52.—I can recall to mind at the present moment three men sent to jail charged with murder. All of them were under that state of ganja delirium which I have described, and the police papers showed no sufficient motive. The cases were far apart in time. Two of them got penal servitude for life, I think. I cannot remember about the third. One was, I think, in Gauhati in 1885. One was in the Dumduma (Dibrugarh district) bazar in the hot weather of 1891. I cannot recall when the third was. It was in Gauhati about ten years ago. I cannot recall it to mind. I know there have been other cases; but these are all I can remember. It was on these three cases that I founded my answers to questions 52 and 53.

In the Gauhati case of 1885 the man was brought in. The police reported he had committed murder while insane. My head jailor, an experienced man, suggested doubt as to the insanity. I went to the place where the murder had been committed, and discovered on inquiry that both the prisoner, a religious mendicant, and the murdered man had been under the influence of ganja. I advised the Magistrate, Mr. Archibald Campbell, to put off the trial that the man might recover. He took about a fortnight to recover and was then tried. I gave evidence. He was sentenced to transportation for life by either Mr. Luttman-Johnson or Mr. Ward. I think the former. This is the only case in which I can give details. I took so much trouble about it, and had trouble getting him to the Andamans afterwards so it impressed itself on my mind. He was troublesome in jail about his religious customs, and a big stalwart man among puny, weak, jail officials. He talked to me freely about his ganja. I do not think he took anything else with it.

Question 45.—The temporary cases I have described here recover in jail and never proceed to the asylum. The cases are not common at Dibrugarh, where I am now, the population take ganja largely. I have there about one case in six months perhaps. As a rule it is the foreign element that take ganja largely; and in the Dibrugarh district there is a larger proportion of foreigners than in any other district in the valley. There are a large number of insane persons sent to the Tezpur Asylum from my district, Dibrugarh, probably more than from any other district I have served in. The cause of this is that there is a large tea garden population. In other districts there are families and friends who look after them. But in Dibrugarh they are not so looked after. They are foreigners. When they become insane an effort is at once made to get rid of them. They have therefore to be taken by the police.

I do not believe that the insane population is larger in Dibrugarh than elsewhere.

These cases are sent to me for observation. The Senior Magistrate at head-quarters sends them to me. He sends a short account—any statement of the nature of the man's insanity which he may have happened to receive. It is in a printed form. It is only sent for the information of the Civil Surgeon, and does not go further than the Civil Surgeon. It is generally very meagre, just the name and description of the man, and the place he has been sent from, and some statement about his character, as violent, etc., or any act of violence or mischief he has done. The cause of insanity is hardly ever given.

As to the descriptive roll there is no hard-and-fast rule. It is sometimes filled up by me. Sometimes only parts of it are sent to be filled up by me. Sometimes it is filled up from information supplied by me. It is a joint production of the Magistrate and Civil Surgeon.

I write out a regular report. This is divided into two parts. This medical certificate is invariably written by the Civil Surgeon. It contains (a) facts known to the Civil Surgeon personally, and (b) facts communicated by others. Both these sets of facts are simply evidences of insanity. They are afterwards used to fill up parts of the descriptive roll. I am not responsible for any thing which is not contained in the medical certificate. And my responsibility in regard to the descriptive roll is limited by the medical certificate. I supply nothing in the descriptive roll beyond that.

It is my duty to state anything that I can ascertain as to the cause of insanity. Thus, if I ascertained that a man had received an injury to his head or was addicted to the use of ganja, it would be my duty to report it. That report would be contained in the medical certificate. If there is no mention of cause in the medical certificate, it means that I have ascertained nothing satisfactory connected with the case.

I cannot say, therefore, what was the cause of insanity in the case of the woman Kitni sent up in 1892. I had not seen the descriptive roll before I dealt with the case. But now I see from it that nothing was known of the woman. I remember the case of Akhilananda (1892) very well. It was suspected at the time that it was ganja. I heard about ganja at the time. But I had no positive evidence at the time as to whether he took ganja. He was a man difficult to get anything out of. He remained silent and morose. From this I rather disbelieved the account I got that he took ganja. In my opinion, the symptoms were inconsistent with ganja. On that account I disbelieved the statement made to me.

I do not remember the case of Chadi (1892). The noisy and violent character is consistent with ganja. I cannot now say whether the symptoms were typical. I do not remember the case of Khadu (1892). But my certificate shows symptoms which are inconsistent with the ganja theory.

I remember the case of Jaganath (1892). I learned afterwards that the man suffered from epilepsy; and his case is one of that variety of insanity which is associated with epilepsy. I ascertained that he had had epilepsy in the jail. I remember I had heard that he used to take ganja; but I had rejected that in certifying to his case. I did not think his symptoms consistent

with the ganja theory. Besides, he had a curiously malformed head, and I associated his insanity with that. It is possible that the adjectives and expressions used in a brief certificate might be the same while expressing what would appear to the observer different symptoms. Thus "noisy" and "delusions" might be used. But the character of the noise and of the delusions in ganja insanity are peculiar in themselves. All I had to certify was enough to show the man insane, so I did not go into detailed distinctions. All that is required is to leave no doubt in the Magistrate's mind that the man is insane. You would, of course, in such cases, omit any doubtful matter.

I remember the case of Saheb Ram (1892). I knew the garden well, and got a full account of the case. It was a case of religious mania only, and there was no suspicion of ganja in the case. The symptoms were not consistent with ganja insanity. I do not think so.

I remember the case of Bapu Ram very distinctly. It had a very tragic ending. The man was discharged cured from this asylum, and cut off his wife's head a fortnight after. He was sent back. He was suffering from phthisis at the time, and whether he is alive or not I cannot say. I do not think ganja had anything whatever to do with his case. He had been a head constable in Sibsagar, and had been discharged for insanity many years ago. I formed no opinion as to the cause. He had a remarkably small brain development, and a curiously smiling expression constantly on the face.

The symptoms I have described as characterising temporary insanity or intoxication from ganja would, I believe, be found in a modified form in permanent ganja insanity. I think that, in the acute stage, experience is most necessary to enable a man to diagnose a case from the symptoms. Even then it is not easy, though some old jail officials hardly ever make a mistake. After the acute stage has passed, diagnosis from symptoms would, I should think, be impossible.

Note by the Commission appended to Dr. Mullane's evidence.

The records in the two cases referred to in Answer No. 52 were sent for.

1. *Empress versus Ramechandra Puri.*

In this case the accused, a religious mendicant residing near Gauhati, had a quarrel with the deceased in the middle of the night, and caused his death by a blow with a *dao*. In his charge to the Jury, the Judge (Mr. Ward) said: "The prisoner was at the time, I have no doubt, under the influence of ganja, but this is a point which you need not consider in giving your verdict." The man was convicted and sentenced to transportation for life. This was in 1885.

2. *Empress versus Judu Murha.*

This man, a garden coolie, was charged under section 325, Indian Penal Code. He had suddenly attacked people in the Dumduma Bazaar with a *dao* and wounded some thirteen persons. The wounds were slight. There was some evidence as to his habits. The Native Doctor, who was one of the wounded, said: "I have known him two years. He has been two years on the garden* * He eats opium. He drinks like other coolies. I never knew him take ganja. I have seen him buy opium; and people said he took opium* * At the time of the attack I do not know if he was drunk. I did not smell any spirits about him. I did not make out he looked mad; but I was in fear of my life." This evidence was corroborated by some other witnesses. The prisoner himself said, "I had drunk nothing, nor touched opium, nor any other drug." In his charge to the Jury, the Judge (Mr. Luttmann-Johnson) said: "He says he had not been drinking that day, or eating opium; and there is no evidence to disprove his statement* * He admits he went to the bazaar to cut people." The man was convicted and sentenced to three years' rigorous imprisonment in March 1891.

20. *Evidence of SURGEON-MAJOR J. W. U. MACNAMARA, Civil Surgeon and Superintendent, Lunatic Asylum, Tezpur.*

1. I have for thirteen years been among people who make use of hemp products to greater or less degree.

2. Whether dry or fresh, the name bhang is applied to the leaves as well as to the growing plant.

Yes. (1) Bhang. (2) Charas. (3) Ganja (or mohini bhang among the Assamese).

3. It grows spontaneously in the districts of Sylhet, Kamrup, and Darrang (the three districts of Assam of which I have personal knowledge). I know for certain that it grows profusely in the Khasia Hills.

4. The names generally understood in Assam are—bhanga, charas, ganja or mohini bhang. Siddhi would only be understood by the educated Assamese, while subji and patti are general terms not used specially in connection with hemp.

5. It certainly grows well in the Shillong hills up to a height of 6,000 feet. I don't remember ever having seen it in the Naga Hills, and I heard it does not grow there. Its favourite spots are

the basti heaps where cow-manure is thrown. The plant bears rain well, as it is abundant at Cherrapunji and Kalapani.

6. Where wild hemp is found it is generally very dense, but I have never seen it in forests or far removed from villages.

7. None.

12. No such reason.

13. No restriction that I know of.

14. There is no preparation of ganja or charas carried on in Assam. Wild bhang is used (1) without preparation (probably by prisoners only); (2) made into pills with water; (3) mixed with tobacco and smoked; and (4) macerated in water (when milk and sugar are added partly to give taste, and under the belief that the effects are more potent and pleasurable).

15. Nothing to add to the reply to previous query.

16. Yes, in their houses. Yes, wherever grown. No because it is impossible to destroy all the male

plants, so luxurious is the growth. The agglutinating material which enters into the formation of the bhang cake or ball is never produced, and the plants run into seed, when they are unfit for ganja.

17. Not limited to any one class.

18. I think so. There is a popular idea that ganja deteriorates rapidly, but perhaps this is due to the fact that it is destroyed annually by Government. Bhang is not stored. Of course, the small quantity of volatile oil the leaves contain disappears on keeping. Bhang deteriorates more rapidly than ganja, while charas retains its properties twice as long as ganja, or about two years. I believe there are no two independent specimens of these drugs identical in strength. Exposure to the air alone causes deterioration, most likely by disappearance of the oil, which is volatile. I think that, like tobacco and pepper, the drug contains, besides the oil, a principle which is volatile, and most probably liquid and quite different from the oil. If this is so, the deterioration can easily be explained as in the case of tobacco, hemlock, and pepper, the three drugs which are known to have volatile liquid alkaloids (nicotin, conin and piperidin).

19. Charas is not used in any shape in Assam. Ganja is generally smoked, mixed with tobacco or alone. It is occasionally drunk, as bhang is, mixed with milk and sugar.

20. Women don't take either. Children don't take either. The use of ganja, with few exceptions, is confined to the lower (not necessarily the poorer) classes. I should say about 5 per cent. of the population of the Assam Valley use ganja. The greatest consumption is on tea gardens and among foreigners.

21. Flat is the kind available, and it is used generally; but for smoking chur, or broken ganja, is preferred as being stronger.

22. None.

23. Yes, not limited specially to any locality in the plains. Probably not more than one or two per cent. of the people of this district (Darrang) smoke bhang.

24. Bhang is generally eaten or drunk. It is occasionally smoked, and mostly by those who can't afford ganja. Unable to give proportions or to fix local peculiarities.

25. Yes; on the increase as regards ganja. I think the increase in the number of shops where it is sold shows greater consumption. The ingress of garden coolies may account for the increased demand; but, as far as I can judge, the practice of smoking ganja is on the increase. The Assamese were an opium-eating race, but they find ganja consumption a less expensive habit, and are taking to it.

26. Occasional consumers are rare in case of ganja. Bhang is taken occasionally. It is impossible to get figures or to define what moderation is.

28. Bhang has no local value.

29. See reply to questions 14 and 19. Dhatura is sometimes, but rarely, mixed with bhang when drunk, to increase the effect. Bhang massala is not sold, but black pepper is at times used to make bhang palatable. Tobacco is mixed with ganja to make it light.

30. Ganja is enjoyed most in company. Hab-

tual takers of bhang take it in solitude, or in company if they get it. The use of all the hemp products is confined to men almost entirely. Women rarely take bhang, and children never take either bhang or ganja.

31. (a) Yes, but less so than in the case of opium.

(b) Not difficult.

(c) Yes. Every beginner is moderate.

32. I know of none among the people of Assam proper. I am aware that Siva is believed to have used bhang and ganja, and that consumers of these drugs invoke Siva when they take them.

33. The use of any of the hemp drugs is looked on as immoral in Assam by the respectable natives of the province. I attribute this sentiment to the fact that their use is an innovation largely introduced by low caste outsiders, such as garden coolies. The result of the use of these drugs is palpably bad to all uninterested non-consumers.

34. It would be a privation, but not a serious one. It is a luxury rather than a necessity even in the case of habitual consumers of any of these drugs.

35. Government could stop the ganja godowns and prevent the cultivation of hemp, but the wild plant is so abundant that its use could not be stopped. No doubt there would be discontent, but it would never amount to political danger. I think it possible that opium would take the place of hemp products if restriction was practised. It is worth noticing that Assam hill people, who don't use hemp, indulge freely in fermented liquors, and that hill people in the plains give up alcohol for opium to some extent.

36. I do not think so.

37 and 38. Can't say.

39. I have no personal experience or knowledge on this point.

40. Bhang is used in stomach and bowel complaints. It is said to assist digestion and act as an antispasmodic and narcotic. It is also used as an anodyne by native practitioners. With regard to the use of these drugs in cattle disease I can give no information. I am told they are used.

41. I think the moderate use of bhang beneficial (a) as a digestive, (b) to give staying power, but that its habitual use has no power for good in fever or in any other way. I can't give particulars of the classes, and I merely imply that it resembles alcohol in this much, that its moderate use in those accustomed to it is beneficial. This reply so far refers to the drinking of bhang. Ganja consumption is the way in which the depraved use of the hemp products is generally met with.

43. Yes.

44. (b) Yes, refreshing.

(c) Yes, intoxication.

(d) Yes, on a journey when food is not obtainable.

(e) and (f) Yes, by its stimulant action. Effects in habituals last about 3 hours.

(g) After-effects depressing.

(h) Yes, longing and uneasiness.

The foregoing replies refer more or less to all the drugs, but the effects are more lasting in the case of the internal use of them.

45. I can't define moderation no more than I can in the case of alcohol. The limit is reached when any ill effects are apparent, when the limit is crossed. The constitution is impaired and digestion is injured. Dysentery, bronchitis and asthma find an easier victim. The moral sense is degraded and habits of immorality formed. In extreme cases insanity result. Of 102 lunatics now under my charge, the insanity in two cases is said to have been due to bhang. Sixteen cases are believed to have been caused by ganja smoking, while opium is held responsible for six. It is noteworthy that two of the latter are females, whereas no female apparently has become insane from the use of bhang or ganja.

I think there is no evidence to show that the hemp drugs are resorted to, to gain relief in disordered mental states, and I think that they are generally fairly credited with being the initial exciting cause of insanity. I have seen more than one case of a single booze causing violent acute mania of a month's duration. The insanity is often permanent. If temporary, it may be re-induced. No typical symptoms. Yes, insanes confess to having used the hemp drugs when they have no recorded history.

47 and 48. No.

49. Don't know. Can't answer these questions.

51. A very large proportion of the prisoners in our jail at Tezpur have been addicted to the use of these drugs in some shape. Of 239 male prisoners, 15 consumed ganja. Crime, it would appear, goes with the use of these drugs: I can't ascertain whether ganja consumers are addicted to any special crime.

52. It is in occasional consumers I have noticed the most serious consequences. The words moderation and excess have no meaning for me in this connection.

53. Yes. It leads to homicidal mania. A case occurred in the Tezpur Lunatic Asylum, in which one of the lunatics, who was believed to have become insane from smoking ganja, killed the compounder in a fit of excitement. He smoked 5 annas worth daily.

54. Not to my knowledge, but I have heard that they are so used, and it is quite certain that they are so used.

55. I do not know.

56. Tobacco is the drug most frequently mixed with ganja to make the effect mild as well as to economise. Dhatura is mixed with bhang to increase the effects in cases where habit has rendered the dose large, and the use of the drug has been very excessive. I can give no further information about the effects of modifying additions.

57. I can give no information not contained in the answers to the preceding questions.

Oral evidence.

Question 1.—My service began in 1879. I have had civil duties from within about six months of the beginning of my service. I have been in what is now the province of Assam since 1880. I have had charge of the Tezpur Asylum since May 1893. I have had no special experience of insanity—no experience except as Civil Surgeon. I had no experience of insanity at home. I had cases under my observation in Sylhet, where I was Civil Surgeon for about ten years. These cases would be under observation for a month,

or two months, sometimes even three months, owing to delay in getting sanction from Bengal to their admission to the Dacca Asylum. Some cases, of course, would prove not to be insane, and would be allowed to go at once. I cannot tell how large a proportion of cases would be thus treated. Idiots would be similarly treated. I would say he is not insane, he is a born idiot, not a man to go to an asylum, but to be looked after by his friends. The majority, however, were asylum cases. My views regarding hemp drug insanity are based on this experience. So also, of course, no man can live in this country without getting information through his ears. I see a violent cooly on the road. His brother coolies say he has been taking ganja. I naturally associate ganja and violence. There is no doubt more in my paper than I am prepared professionally to establish.

There is no man in my profession who does not get information from books. I have read of preparations of ganja. Some preparations I only know from books. But I know no literature dealing with insanity due to hemp drugs. There is none I can mention.

As to general effects, I have obtained my information from practice as Civil Surgeon, from books, and from hearsay. I have obtained a great deal from hearsay, especially in tea gardens, and less from books than in any other way. I have seen a good number of people affected with ganja, putting insanity out of account. I have seen them not in my practice, but going about the district, especially in the neighbourhood of gardens. These cases were not under observation for any period—seen once perhaps and never again. You do not see the man take ganja; but you get a fairly good history that he has taken it. These were cases of people who were very violent or noisy and troublesome to their neighbours. There is no case of disease among them. Apart from insanity experience, I have no personal knowledge of any disease being induced by hemp drugs in any case.

Question 2.—I think the word "mohini" means pleasant, seductive, or agreeable. It is a name given by the Assamese to the growing hemp plant.

Question 3.—I have never been stationed in the Khasia Hills; but I had to visit a jail at Cherrapunji, and have seen the stuff there. I have myself seen it in the three districts I have named in this answer.

I have no reason for supposing that the plant does not grow in the Naga Hills; but I have been told so. I doubt the statement. I have been in the Naga Hills, and never saw the plant there, and not told it did not grow there. I was not specially looking out for it. The "Naga Hills" is a big word.

I have never seen ganja growing in the forests. It is always about houses and *bastis*. It does not seem to be cultivated. But it was possibly once cultivated, and now comes up, degenerated from something once sown there. I go much among the villages, for vaccination principally. I remember having seen the plant in Assamese villages. I think you would find it probably in any Assamese village. I find it all over the place here, even by the roadside. It is too easily got to suppose that it is cultivated. I have seen it in Assamese villages far away from places where there are foreigners. But it would be difficult to get a place in Assam very far from tea gardens.

They are dotted all over the place. Where there is not a tea garden, you have either a howling wilderness of grass jungle or an Assamese village; and in such an Assamese village you would be almost sure to find it. I cannot say, of course, that there was any general sowing of the plant, except perhaps by the wind. The Assamese are certainly not now a bhang-consuming people whatever they were. I doubt if they ever were.

Question 14.—Prisoners go out to extramural labour and pick the growing plant and eat it dry. I sometimes get a ball of ganja leaves close to the jail. It seems to me that it is put there by prisoners for their use. It is so easy for them to get it. I have seen one case since I came here. Other people may use the stuff too, but not "without preparation." The uses by the public generally are shown in clauses (2), (3), and (4) of this answer.

Question 16.—By "bhang cake or ball" I mean the manufactured article, the pressed head as sold in the shops. All I mean is that the wild plant, owing to the male plant not being removed, has not sufficient glutinous matter to make the cake. What I describe as smoked in question 14 is the dried leaves of the wild plant, not the ganja cake or ball. I have not seen the ball. I believe round ganja is not sold here much. What I have seen is broken fragments taken out of the clothes of prisoners. I have not seen it in shops. I do not know the flat or round ganja in mass as produced in Bengal.

Question 20.—Here I take the whole population, including garden coolies. I arrived at this average by getting up all my subordinates and asking them what they thought; and I struck an average, checking it by what I thought likely myself. I may have overstated the percentage of habitual consumers. What I meant was five out of every hundred of the population. That would be nearly 20 per cent. of men. That would be high. The Assamese do take it, but in small quantities, and, as a rule, only occasionally. It is not an Assamese vice at all. I do not know of any class of Assamese that takes it. I do not think the hill people take it even to the same extent as the Assamese. I mean the hill people beyond the frontier. Neither do our Nagas take it to my knowledge. The Khasias do not take it much. Of the Garos I know nothing. These three are our only hill tribes. Of course my knowledge of the hill people beyond the frontier is based entirely on what has been told me. I have no personal knowledge.

Question 23.—By "bhang" here, I mean bhang, the growing plant, not the ganja proper. I am speaking of the whole produce of the wild plant. By bhang I always mean the growing plant which we have here; by ganja I mean the imported article. The only ganja I know is the excise article.

Question 25.—My opinion is that ganja consumption is on the increase. It is based on what was told me unanimously by my subordinates in all departments. I asked them all to study the question, and then I had them together and asked them. Their opinion is certainly, I think, a fair expression of what natives think. This is the only ground I have. I never gave the matter thought till then. What I asked the men was what they saw when they were boys; and they told me the hemp consumption was on the increase among the Assamese themselves.

Question 45.—As regards cases which used to come to me as Civil Surgeon in Sylhet (for exam-

ple) a man would be sent to me with a letter to keep him under observation and report on him on a fixed date. I had to report as to his state of mind (if a criminal), as to whether he was fit to make a defence, or (if not) as to whether he should be sent to the lunatic asylum. With that letter I would receive information, as a rule, simply as to the facts which led to his being under arrest. That was all. But as a good many of these cases came from tea gardens, I got more detailed information regarding the circumstances leading to the arrest. But it was most exceptional to get any past history of the man. As to his habits with regard to intoxicants, I do not think it was ever given. Sometimes I would get an account of the facts which led to the attack of insanity. I would get that through the Sub-divisional Officer, prepared by the police. It was sent usually after the man had come, because it took time to make the enquiries. Very often we had to send the man on to the asylum without the form, because it was not received. This information might be of value to me in forming a diagnosis of the insanity if it told me, for example, of any relative being mad. There is a heading for "Supposed cause." It is the police who supply this information, and relatives of the man, if he has any. I think it is fairly reliable if there are relatives for the police to inquire from; for the police have no object in making wrong statements. But it is of little value to us; for I usually decide the question of insanity on the merits of the case, the man's own acts and symptoms, quite apart from history. That is all I have to do. I have only to submit the medical certificate containing facts indicating insanity. I do not certify to cause of insanity as Civil Surgeon.

The information regarding cause is obtained by the police, certainly not by the District Superintendent of Police, but by some subordinate. I do not know who it is that gets it. My idea of the reliability of the information rests entirely on the fact that the police have no inducement to report falsely. As a rule, though not, I think, always, a man of technical knowledge is required to ascertain cause. I say "not always," for the cause may be obvious, as losing all friends, having an injury to the head and never recovering, having a bad fever and never recovering, or excesses of liquor or ganja. All these are easily recognizable by an ordinary person. As to these intoxicants, I do not think the police would be in a position to discriminate between the moderate or excessive use. I do not think I could do it myself. I think the police are usually guided by the fact that the man had only one "spree," one casual indulgence. If a man were found to be a habitual user of the drug, I think they would write down ganja, without any reference to any special outburst of indulgence, if they could get no other cause. I think they would be ready to jump at a conclusion. But, of course, I cannot personally say with certainty what the police would do. I do think that an intelligent policeman would put down ganja as the cause merely because it was mentioned that the man used the drug. He would enter "unknown" under cause, if he did not conclude that the insanity was really due to ganja. I know Mr. Driberg's* view of the unreliability of the police information; but I find in the asylum that some lunatics whose insanity is put down to ganja by the police admit that they have taken ganja outside and that it drove them mad. When I wrote my answer to this question, I called up all the

* Mr. Driberg's statement read to witness.

men whose insanity was ascribed to ganja. Some refused to answer. But some said their insanity was due to ganja. I do not think any said it was not. I do not remember how many said their insanity was due to ganja. Of course, if such men got a hint beforehand that I was going to ask about ganja, they might say ganja, whatever the facts were. The men I examined were the sixteen men then shown on my register as ganja insanes. They were not promiscuously selected. I have asked other insanes whether they used ganja outside. They usually say "no," even those who did use it. I did not ask any other insane whether his insanity was due to ganja. The fact that all of those sixteen who answered said they used ganja, and that other lunatics denied it even when they had used it, does not lead me to conclude that the former had got a hint, for I sent for them one by one. I am not prepared to say that I knew that any of those who denied it had really used it outside; but I say they would deny it even if they had used it.

On the whole, then, I think that when the police ascribe insanity to ganja it may be fairly accepted as reliable.

When a man is received at the asylum, I receive with him the medical certificate and descriptive roll. The cause is entered in the general register from the police statement, *i. e.*, from the descriptive roll. We have nothing whatever to do with it. It is entered by the overseer in charge of the asylum, and ought to correspond with the entry in the descriptive roll. I compare it when the page of the case book is being prepared. I never compare the entry in the general register. Where the descriptive roll showed that the man was addicted to ganja, but that the cause was "unknown," "unknown" should be entered in the general register and case book. For these books are filled up when the man comes in. I never alter any entry in the general register. The statements of the annual report are prepared from the general register by the asylum overseer.

I have no doubt that the statement* of asylum procedure given by the witness, Betha Ram Surma, asylum overseer, is quite accurate. If the Superintendent tried to keep the register, it would be constantly in arrears when he was out; so the overseer must be held responsible. I certainly do not approve of the procedure described. I think that, whatever is entered in the papers, should be put on the books; and nothing should be altered except by the Superintendent. The thing goes on now as it did. There is no order for change. But if I found out that such alterations were made I should have forbidden it. I have no reason to think that the register entries are at present more in accord with those of the descriptive rolls than they were in 1892, for the two men are the same.

I think that the register entries are inaccurate as they stand. The entries of the descriptive rolls should have been copied. It is wrong to enter cause merely from the statement of habits in the descriptive roll. If, on the other hand, the overseer were to alter an entry from enquiry from the lunatic, that would make the entry in the register more accurate if the original entry were "unknown." I think the lunatic's opinion as to what made him insane would be well worth having. If the man admitted the use of ganja it would be nothing; but if he attributed his insanity

to ganja it would be of value. I do not think we ever discover the cause of insanity in the asylum, therefore we never alter the heading in the register. The register does not concern me in the very least as far as the point of cause goes. There are no typical symptoms of hemp drug insanity. We never diagnose the cause in the asylum. The diagnosis of cause is wholly based on information received in the descriptive roll. We have nothing to say to it once the man is admitted.

I sometimes make enquiries as to cause, such as asking a man about his habits, and so on, for my own satisfaction in regard to the case before me. But I make no record of them at all.

I think the "general register" of the asylum very inaccurate, and that any return prepared from it would be very inaccurate. Even if the entries in the register had corresponded with those in the descriptive rolls, I think the returns would not form a sound scientific basis for any theory regarding the connection of hemp drugs with insanity. There is nothing scientific about it. At the very best the information is from miserable units, the police enquiry or the statements of lunatics themselves at the best.

The views that I have set forth regarding insanity of a permanent nature resulting from hemp drugs are based solely on my asylum experience and my knowledge of the effects of these drugs. My opinion, based on asylum experience, is that insanity of a permanent type may be produced by ganja. The asylum experience I refer to is my conversation with lunatics every day. Some of the hopeless cases in the asylum are, so far as I can judge or ascertain, truly ganja cases. I base this on the statement of the lunatic alone. This is the sole basis of my opinion as to the cause; and I know one case of permanent insanity where the lunatic says it was due to ganja. There is no other case.

In regard to the effects of the drugs, I mean what I have seen in people taking the drugs just as I know the effects of alcohol. I have never seen a man actually take the ganja, although I have tried to get people to do so. I have only had the statement of the man himself as to having taken the drug. This experience is outside the asylum. I have not had the cases for observation for any length of time, not more than half an hour. The result of any observation is that he is like an ordinary drunken man. He yells and shouts and gesticulates wildly, and is often violent to those about him. I have never heard of any of these cases becoming insane.

My own personal experience, therefore, does not prove to me that the drug causes insanity. I never saw any man take the drug; and I never had a man sufficiently long under observation to see the development of insanity. I do not think I could distinguish between the intoxication of liquor and ganja from the appearance of the man. Smell of course would show. I think a little touch of dhatura would not be at all unlike ganja intoxication. Dhatura might lead to insanity. I had a case of a man in Sylhet who became insane from dhatura. I do not think that dhatura insanity could be distinguished from ganja insanity. But it would be possible to diagnose dhatura intoxication from hemp drug intoxication. The dhatura case above referred to had gone past the intoxication stage and become chronic.

My statement as to there being no case of a female whose insanity is due to ganja is based on a census I caused to be made in the asylum. I

* Read over to witness.

told my overseer what I wanted, and sent him round to make it out. I was not aware that there were three females in the returns for 1892. These had all been released before I made my census, and there were none then under my charge.

Question 51.—The proportion in the jail was then about 6 per cent.; at the present time it is about 10 per cent. (26 out of 267), as I ascertained yesterday. These are high figures compared with the 5 per cent. consumers in the district. I do not think that this is explained by the fact that criminals are more from the lower orders, who also are mainly the consumers of the drug.

Question 53.—My opinion about homicidal mania is based on the case I have quoted. There is another man also in the asylum who killed a man outside. Both these cases are associated in my mind and in the asylum with ganja. But this merely means that ganja was the cause of insanity. They were both insane when they committed the murder. They are both cases of insane men who committed crime.

Question 56.—I have no personal knowledge of the use of dhatura in this way. I have been merely told what I have written.

21. Evidence of SURGEON-MAJOR H. C. BANERJI, Civil Surgeon, Sylhet.

1. In my official capacity as Civil Surgeon, Superintendent of Jail and Inspector of Labourers in this district, I have occasionally come in contact with persons who smoke ganja and drink bhang.

2. Yes; they are known as ganja, bhang and charas.

19. Yes.

23. Not within my experience.

28. Charas is rarely, if ever, consumed here so far as I know.

(a) Ganja ■ chattacks per mensem, cost 3 rupees.

(b) Ganja 9 chattacks per mensem, cost 9 rupees.

Bhang is not sold in this district. It mostly grows wild at the foot of the hills.

29. With ganja—

(a) Sada or tobacco leaf.

(b) Dhatura, opium, nux vomica.

With bhang—

(a) Milk, sugar, black pepper, aniseed.

(b) Dhatura and nux-vomica seeds.

Ingredients (a) to make the smoke or drink pleasant.

Ingredients (b) to increase the intoxicating effects.

Bhang massala is not sold here.

30. Ganja is generally consumed in company and bhang drunk in solitude. They are mainly confined to the male sex irrespective of any particular time of life. Children do not usually consume any of these drugs.

31. (a) Yes.

(b) Yes.

(c) Not so marked as in the case of alcohol or opium.

32. As regards ganja it is a custom here with many of the lower class Hindus to smoke the drug on the occasion of a puja called "Trinath's Seta." This puja is held by votaries of the god Mahadeo pretty often in the year, when offerings are made in fulfilment of vows to the deity; ganja is hence essential on these occasions and is smoked in excess. It is likely to lead to the formation of injurious habits.

36. No.

37. Cannot say; have no experience.

39. Bhang is drunk, not smoked, here; its action is generally much slower than that of ganja smoking. It chiefly affects the nervous

system by first stimulating it, then gradually producing narcotic effects. Ganja is always smoked and not drunk here; it affects the brain quickly. At first the person is excited, talks, laughs, sings inordinately and is often subject to hallucinations chiefly of a sexual nature. These symptoms are generally followed by deep narcotism.

40. Kabirajes use ganja as a sedative and a stringent in chronic diarrhoea; and as a sexual stimulant in the early stages of impotency.

Yes; in diarrhoea.

41. Ganja—

(a) May help digestion.

(b) It certainly gives staying-power under severe exertion or exposure and alleviates fatigue.

(c) It is said to be anti-malarial and anti-rheumatic; it also helps to dry up dropsical effusions into cavities.

Concentrates one's thoughts on religious subjects.

42. Beneficial with many.

44. (b) Yes.

(c) No.

(d) and (e) It does not allay hunger, but increases the appetite.

(f) Only for a short time.

(g) None that I could ascertain.

(h) To a small extent.

45. (a) Not to any appreciable extent.

(b) I do not think so.

(c) No.

(d) No.

(e) No.

(f) No.

46. Habitual excessive use of ganja thoroughly impairs the constitution; it often brings on in its train one or other of the following diseases: dysentery, asthma, bronchitis, hæmoptysis, hæmatemesis; it thoroughly impairs the moral sense and makes a man lazy and addicted to all kinds of debauchery. It blunts the intellect and brings on eventually a kind of insanity called dementia. Here is a case in point. Juma, a native of the town, started life as a cook, smoked ganja excessively, became a syce, was obliged to leave that occupation, now walks the streets a helpless pauper suffering from dementia; his constitution is perfectly broken up; he is dirty, talks incoherently and is ever ready to put his hand to any kind of dirty job for the sake of a few coppers to procure ganja.

47. No.

48. Generally speaking ganja-smokers of this class have very few children and they often suffer from impotency or a tendency to it; there are however instances where a son of a habitual excessive ganja-smoker has contracted the vice, but this might be more from constant association than from any hereditary taint in the blood.

49. Ganja—

- (a) In some cases.
- (b) To some extent.
- (c) Not directly.
- (d) No; not when used moderately.

50. Ganja—

Is frequently used in excess to cause impotence, for example the Hindu sanyasis and fakirs and Musalman pirs are inveterate ganja-smokers to repress sexual desires and to concentrate their minds to the worship of the Almighty.

56. Ganja—

(a) Is generally used with tobacco leaf; its effect is probably to give more flavour; it does not, as far as can be ascertained, lessen the intoxicating effect of the drug.

(b) In excess it is sometimes mixed with dhatura and nux vomica seeds and even opium, and the effect of this admixture no doubt is to make the composition highly intoxicating.

57. I have no experience as regards charas, nor do I know of ganja being drunk in this district.

I have no other information or opinion which I desire to lay before the Commission in connection with these drugs, except that on the occasional excessive use of the drug (hemp). I have seen cases of acute mania among persons who occasionally indulge in this drug in excess. In these cases ganja acted as a predisposing cause to the disease. I give below a few illustrative cases:—

Case No. I.—Babu B. Sen is at present a respectable private medical practitioner of this town. He is nearly 53 years of age. About 8 years ago, he began to smoke extract *Cannabis indica* mixed with native tobacco for chronic dysentery. He got some relief. After some time, he began smoking ganja (broken ganja) in excess, consuming more than half a chatak daily. Within six months he became a raving lunatic, and his friends had to take him away and put him under restraint. He returned to town after a year quite cured. He has again been practising his profession since 1886. He is respected by every body. There is no trace of insanity in him, and does not smoke ganja or tobacco, nor take any spirituous liquor.

Case No. II.—Golak Chandra Das is a native of Sylhet. He was a Government office clerk for some time but had to give up his post owing to excessive ganja smoking. He was twice attacked with acute mania with homicidal tendency and was on each occasion sent to the Lunatic Asylum at Dacca for safe custody and treatment. He recovered completely each time, and about the end of 1891 again returned to town and began to live with his family. During last six months, he has again taken up the old habit of ganja-smoking with occasional indulgence in country liquor. About four weeks ago he, without any warning, went stealthily behind where his cousin was reading and dealt him a most terrible blow on the top of the head with a heavy piece of wood. This

blow fractured the skull, lacerated the brain substance and killed the man in two days. The criminal lunatic is now under my observation in the jail and will be sent up for trial at the next sessions. He was wild with excitement for the first few days and is now quieting down gradually.

Oral evidence.

Question 1.—I am 14 years in the Indian Medical Service. Nine years were passed in military service and five years as Civil Surgeon in Assam. As medical officer of the jails at Sibsagar and Sylhet, I have had some experience of insanity, but I have had no special experience in connection with lunatic asylums. Nor have I made a special study of insanity.

Question 29.—I have heard of dhatura or nux vomica or opium being used with ganja, but I have never come across a case. Some men told me that they themselves used these things when they wished to increase the intoxicant effect of ganja. These were mostly excessive consumers. I accept those statements as true. I should suppose they preferred to take these things to increasing the allowance of ganja, because they were poor men, such as dhobies and syces and mendicants. The men who gave me this information were some 8 or 10 out of 18 or 20 whom I examined. Nearly all the 18 or 20 were excessive consumers. The proportion of those who admitted that they occasionally took dhatura and such drugs was 50 per cent. Nux vomica is a nerve stimulant, not an intoxicant. Still it does increase the effect of the intoxicant with which it is used. My informants did not lead me to suppose that dhatura was dreaded for its bad effects. I believe it to be an intoxicant.

Question 39.—I was informed by the fakirs and others of whom I made enquiries that ganja did concentrate the thoughts on religious subjects. I was also informed directly by people like my syces that hallucinations of sexual nature followed upon ganja-smoking. These hallucinations were experienced in dreams at night. I should think that these drugs acted as aphrodisiacs, for I can recall one case in which I administered the extract of *Cannabis indica* with nux vomica successfully in a case of sexual weakness. I have no other personal experience. I do not think the whole effect in this case was due to the nux vomica. I cannot refer to any book in which *Cannabis indica* is stated to have aphrodisiac properties.

Question 40.—I was informed by two kabirajes that they used the drug as a sedative in nervous diseases. I do not think it is used to any large extent for this purpose. The only two kabirajes I asked said they used the drug, but the impression I gathered from them was that they only used it occasionally. I am not prepared to say that ganja is anti-malarial, but as it is a nerve tonic I think it would be beneficial in cases of fever. I understood my informants to say that they took ganja when they got rheumatic pains and that it relieved them. I was told this by habitual smokers, and also by people who never smoked except to relieve pain. A native practitioner showed me two cases which he said had been dropsical, and had been under treatment by various remedies for some time. Finally he administered the tincture of *Cannabis* internally and ordered the patients to smoke ganja. When I saw the patients they were dried up and there were no dropsical appearances. On the contrary, they appeared atrophied. The practitioner was a failed student of the Medical College. He is a good practi-

tioner, and has been working in Sylhet for some seventeen years, so that I place reliance on his statements. I did believe that the cure was due to this, and therefore put it down. I did not enquire what the dropsy was due to. I have heard that effusion into cavities does undergo spontaneous absorption, but I have no experience.

Question 46.—I have seen dysentery in patients who said that the ailment had followed upon excessive use of ganja. This information was given in answer to my enquiries whether they had eaten bad food or got chills. They said no, but they had indulged more largely than usual in ganja in company with other people. I did not make further enquiry regarding the exceptional dissipation indicated in their replies. The cases were rapidly cured by a little astringent and regulation of diet without ipecacuanha. I would call these cases of dysentery of a mild type. I have seen two cases of hæmoptysis which, in my opinion, were due to ganja. One case I saw three times within a fortnight, after which he was all right, and I did not see him again. I think I saw the other case twice, and then the man never returned. They were both out-patients. Hæmoptysis is, strictly speaking, a symptom and not a disease, but it is entered as a disease in the "Nomenclature of Diseases" of the Royal College of Physicians, London, so I regard it as a disease. Hæmoptysis is a common symptom in phthisis. It is generally a late symptom. It may be laid down in text-books as one of the early symptoms, but that is not my experience. In the two cases I have mentioned symptoms of phthisis were absent. The lung symptoms were dullness and moist rales. I made only a rough examination as they were out-door patients, and prescribed rest and astringents and low diet. I have only heard from some native practitioners about asthma, bronchitis, and hæmatemesis, not seen any cases. I ascribed the cases of hæmoptysis to ganja-smoking, because the patients said they were ganja-smokers. They were fairly young men, without, as far as I could make out, any lung disease, and I could discover no other cause. The dullness might have been due to effusion of blood, but could not have been due to physical consolidation, because in one case at least it was completely cured. In both cases the dullness was at the base of the lung. I made a fairly searching enquiry in these cases. I asked if there had been any fall or blow or exposure, and could not ascertain that there had been any.

My experience of insanity is connected largely with cases which have come under my observation as Civil Surgeon. On the average 30 or 35 such cases come before me during the year—some are sent to the asylum and some are made over to their friends. I do not treat them; I merely prevent their doing harm, and sometimes give them a sedative when they are violent. My duty is to ascertain their state of mind, and to forward them to the Deputy Commissioner.

I should say about 20 per cent. of these cases are due to pure ganja, and of the rest some are due to ganja with country liquor. The police send a report with the man. This always gives information about cause. Pretty often the man's friends come to jail to enquire about him and get his release. This occurs in about half the cases. I see the friends myself in the majority of the cases in which they do come when I am in the station, and I always ask them about cause. They come to ask me about treatment, and what is to be done with the man, and whether the disease is temporary or likely to be cured. I ask the friends because I do not regard the police

reports as good enough. I ask the friends without regard to the fact that the statement of cause is contained in the police report. If it is given in the police report, I ask so as to have it confirmed. If the police reports showed ganja as the cause, I should ask what kind of ganja he smoked and how much, and whether he was in the habit of taking other intoxicants, such as country liquor or opium. In fact, I should go mainly for ganja and not make any detailed enquiry into other causes. That is what I do if they put down ganja. If they do not, I try to find out other causes of insanity, such as grief, shock, etc. If no cause is shown, still I make special enquiries about ganja, country liquor, and opium, as well as other causes, including heredity. The information is better and more satisfactory than that given by the police, because it is more full and I know how to question them. I think that the conclusion thus arrived at as to cause is in many cases different from that reported by the police, that is to say, in nearly half the number of cases. The police make mistakes in about half the cases. When I speak of what I receive from the police I include what I receive from sub-divisional officers. The people from whom I get my information are the same ignorant class with whom the police have to deal, but I can get more out of them owing to my professional knowledge. I prefer my diagnosis to that of the police, and I am fairly satisfied with it because it is assisted by personal observation of the case. There is no special differential diagnosis between insanity caused by ganja and other insanity, but I see that the symptoms do not conflict with the history. As, for example, if I get a history of excessive ganja-smoking and the man is raving mad, I put the case down as "excessive ganja-smoking." If I found the same symptoms without a ganja history, I should try to discover another cause. There must be a history of excess of ganja-smoking to justify this diagnosis; the mere mention of ganja would not be enough. I have always discriminated between moderate and excessive use of ganja, at least ever since I was transferred to the Civil Department. In the regiment I did not. It took me about a year to learn what was to be regarded as excess and what not. I should say that in Assam one to two chittacks a day of the Bengal ganja was excessive use. If the friends admitted the use of half a chittack, I should put the cause down to ganja, but not for less. Many people admit that amount of use, and generally the quantity in chittacks is mentioned, but some say only "bahut pita." In my written answers to question 28 I have entered nine chittacks per mensem as the average allowance of the habitual excessive consumer. This was done after enquiry and is right. I have now stated only what I thought, and I am prepared to alter the quantity to one-third of a chittack. Notwithstanding the discrepancy which has been pointed out to me, I still maintain that in diagnosing the cause, I enquire as to the probable amount in chittacks which the man has been in the habit of consuming and form my opinion accordingly. If the police report mentioned ganja without stating the amount used, and no friend came of whom I could make enquiries, I should reject the police entry and send up the case with cause of insanity unknown. If the police report said "bahut" I should accept ganja as the cause. Then it is the information gathered from the police or the man's friends that I send to the Deputy Commissioner. Having taken such pains to ascertain that the consumption in a ganja case wa

excessive, I should enter *excessive* in certificate which goes to the Deputy Commissioner.

What I have stated above describes my procedure. I have read the abstract of my reports in the case of Madharam Deo in the memorandum of cases admitted into the Dacca Lunatic Asylum in 1892, and I see that in this case I did not follow this procedure, inasmuch as I appear to have entered "consumption of ganja" without the word "excessive" as the cause upon the information "that the lunatic used to take ganja." I am unable at present to explain why I should have departed from my usual practice.

The above procedure relates to cases arising when I am in the station. I am absent from my station about ten days in each month. In my absence a case would be investigated by my subordinate after my own method, and the papers would be left for my signature on my return, and occasionally I sign them hurriedly.

I did not know Juma until he was in the condition described, *viz.*, a helpless pauper suffering from dementia. I learnt his history from people in the place. He had probably been in that condition for some time when I came to know him. The case never came under my professional notice.

The case of Babu B. Sen did not come under my professional notice. He had recovered and was in practice six years before I knew him. I got his history from himself and others, including Dr. Sanyal. I accepted the statements of these persons, and consider that they justify me in forming the opinion that the case was one of ganja. I attach special weight to the gentleman's own statement and that of Dr. Sanyal, who, however, did not treat him professionally.

Golak Chandra Das was unable to make his defence, and is now in the Dacca Lunatic Asylum.

22. Evidence of DR. T. D'O. PARTRIDGE, Civil Surgeon, Silchar.

Oral evidence.

I have been in the Uncovenanted Medical Service since 1868 in India. I have had no special experience in insanity. I have not made it a special study, nor have I had any special charge connected with insanity. I am now Civil Surgeon of Cachar. My service, all but two years, has been in Assam.

I have had considerable experiences of cases of lunatics under observation. The case is sent to me with an order from the Magistrate to observe the man and state whether he is sane. This contains only a few words containing a short summary of the case. It is generally sent by the Deputy Commissioner, but occasionally by a Subordinate Magistrate. I have no recollection of receiving any paper filled in by a police officer. What I get is in the form of a docket from the Deputy Commissioner. In almost all cases there is a statement as to violence and so on; but in most cases it is impossible for me to ascertain from the papers what the cause is. As a general rule, then, I have no material at the first to judge of cause. I get no descriptive roll or anything more than the letter.

I have to fill in the cause of insanity in the "Medical History." I do not see the man when he comes; and I never see friends or others accompanying him. I know nothing of the Hospital Assistant seeing the friends. I go down to the jail in the morning and see the patient who was brought in the day before. If the docket shows cause, well and good. If not, I ask the Magistrate if he can give me any information. As a rule, the result is rather negative evidence. You do not get much information as to the cause. Sometimes the cause is shown, but sometimes only as a possible cause not strongly put. I should simply put that down and say "possibly from such or such a cause." If in any case ganja was put down either in the original letter or in any paper afterwards received through or from the Magistrate, I should enter it as the probable cause. If ganja was not assigned as the cause, but it was stated that the man used ganja, I should enter ganja as the probable cause with a query. It is never stated how much the man takes, except that it is occasionally put that he is "a confirmed ganja-smoker." The amount can never be found out.

I do not consider that I am called on to make further enquiry, and I never do make any further

enquiry. I think this procedure is fairly satisfactory. I have no better information. I do not think that the information is very reliable. I believe that it comes from the friends of the insane and from police enquiry. The friends will give the cause as far as they can judge. I think they can fairly well judge. The ordinary constable, so far as I know, conducts the enquiry. I am not certain who does it. I think he can pretty fairly judge.

The form I use contains the words "probable cause." It is only that that I have to certify.

I do not think that it is fair to put down ganja as the cause of insanity merely because a man is a smoker, but it is done. I would do it if I could find no other cause. I do not think that ganja frequently causes insanity—certainly not more frequently than drink in this country. I think drink is more liable to produce insanity than ganja. But I should prefer to enter ganja as the cause to saying "unknown," because there must be some cause and ganja may have been the cause; and it looks better in my view to enter the cause as stated by the Magistrate.

In the two cases of Monuhar Mahanti and Narayan Nawa sent by me to the Dacca Asylum in 1892, I entered under habits "Addicted to ganja" and under cause "No other cause is known except what is mentioned above." By that I meant not that I had ascertained that ganja was the probable cause, but that I had ascertained no other. I therefore, as said above, entered ganja with a query, as it were. I think that it is very probable that the grounds on which ganja has been assigned as the cause of insanity are in very many cases inadequate. If I had to judge scientifically of the connection of ganja with insanity from the certificates I have myself given as to "probable cause," I should (I think) have to discount many of them.

I have never discriminated between the moderate and excessive use of the drug. I have never seen any evil effects from the use of the drug except in the cases sent to me for observation in the jail. I may have seen smokers: I may have seen moderate smokers: I may have seen excessive smokers; but I have no means of knowing that a man is a consumer until he is thus brought before me for observation. The effects apart from that have never attracted my attention at all.

23. *Evidence of* DR. H. A. MACLEOD, *Civil Medical Officer, Garo Hills.*

1. Only general observations.
2. As far as I know, the names are the same.
19. Used for smoking.
23. Sometimes by lower classes when ganja is not obtainable.
29. (a) With ganja, tobacco leaf, and rose water. With bhang, molasses, pepper, cucumber seeds, ghi, milk, and aniseed.
- (b) Dhatura is mixed with bhang to increase the narcotic effect.
30. Bhang is generally used in solitude; ganja and charas in company. It is mainly confined to the male sex. Children don't usually consume any of these drugs, but learn to smoke by imitation.
31. (a) Yes.
- (b) Yes.
- (c) I believe not in the case of bhang.
32. Ganja and bhang are used by jogis to enable them to perform their religious vows. During Durga and Lakhi Pujas, it is customary to offer sweets and bhang when friends visit.
36. Yes. Causes are imitation and the slight narcotic effects produced by alcohol.
37. The effects of charas are more rapid than those of ganja. Bhang causes inebriation of a cheerful kind, a desire to eat food with relish, and to seek aphrodisiac enjoyments. It causes no nausea or sickness, and has no effects on the bowels. Its effects are more lasting. Ganja causes agreeable reveries, heaviness, and laziness, but the man can be roused to discharge routine occupations, such as punkah-pulling. Its narcotic effects are felt sooner than those of bhang.
40. Bhang is used for its medicinal properties. It is also used for colic in cattle.
44. Is partly answered by the above. Bhang is refreshing, produces intoxication, creates appetite, and the effects last for about three hours, when narcosis is produced. The after-effects are slight giddiness and vascularity of the eyes. Ganja is stimulant, anodyne, and narcotic. Its effects lasts from one to two hours. The want of subsequent gratification produces a longing and uneasiness.
45. Causes bronchitis and asthma, and induces laziness.
47. Does not appear to be hereditary.
49. Bhang is used as an aphrodisiac, and is used by prostitutes.

24. *Evidence of* DR. J. McNAUGHT, *Civil Medical Officer, Nowgong.*

1. None special, beyond enquiry from people who use hemp.
2. The only sort obtainable in Nowgong is the flat ganja. Charas is not imported. Round ganja is not now imported. The broken ganja is not imported.
19. No other uses than for smoking are known.
23. The wild hemp is said to be used for smoking sometimes by people who cannot afford to buy the excise ganja; but this is to a small extent, as it is not so palatable.
28. Not known.
29. Not as far as known: No.
30. As the excise ganja only is imported, it is used. The use of the drug is not very prevalent; mainly confined to the male sex, principally adults. Not given to children.
31. (a) Yes.
- (b) Yes.
- (c) Slight.
32. None known personally.
36. No.
37. Not known.
39. Not known.
40. Not known. The wild ganja is used for cattle diseases by the people of Assam. They do not buy the excise ganja for this purpose.
41. (a) Cannot say.
- (b) Probably does so.
- (c) Not.
42. It is said that in whatever frame of mind or disposition the consumer of ganja happens to be in, the use of the drug enhances or increases that disposition, *i.e.*, if there is a tendency to be pleased or happy, the person becomes more pleased or happy; if brooding over wrongs, these assume an extreme form; if in a violent or quarrelsome mood, this is increased so that assaults or murder may result.
44. At the time of smoking the drug, whatever tendency there is in the mind is then exalted. The person feels refreshed, and there is in proportion to the quantity consumed some intoxication. The feeling of languor and weariness is not noticed for the time. Want of subsequent gratification produces uneasiness.
45. Every drug used regularly, and ganja also has an effect upon the system that becomes a habit, and whatever its effect, or relief, is sought for at the usual time. Persons who have slight control over their desires are liable to increase the quantity or the times that it is used. The extra stimulation of the brain with its symptoms of intoxication must be prejudicial to a healthy condition of body and mind. Those who are deprived of it for a time feel uneasy or sometimes suffer much from a weary feeling and aching of the whole body, and they will make special efforts to obtain it. Its use enslaves the person. The habit of inhaling the smoke into the lungs causes cough and irritability, and the gradual deposit of carbon, even in small quantity, tends to obstruct the air passages, and tends to bronchitis.
- It deadens the intellect and moral sense, and conduces to lazy habits which are tempered by fits of extra exertion when the drug is used.
- The drug tends to produce insanity if used in excess. This is curable, but the use of the drug again may re-induce insanity.
46. All the foregoing are more enhanced.
47. There is every probability of hereditary tendencies in such cases.
48. Ditto. Enhanced.

49. Not as far as known, but undue stimulation by any drugs tends to produce a lessening of power eventually. I have found from experience that ganja-smokers are put under the influence of chloroform with much more difficulty than non-users.

50. The same; but enhanced.

56. No experience of admixtures.

57. Not known.

In conclusion, a ganja-smoker is not a trustworthy person as a rule, and there are many objections to its use. Its use tends to excite, and causes a desire for exertion; it helps to exalt the mind's tendency at the time, and the person may thus be dangerous. The complete stoppage of its cultivation, importation, and sale in Assam would be no hardship, but rather a great benefit.

25. *Evidence of ATUL CHANDRA ROY,* Bengali Vaidya, Assistant Surgeon, Emigration Department, Tezpur.*

1. I am a Bengali by birth, and have lived in Assam for about 11 years. In both the provinces I have had opportunities of seeing people using hemp drugs and also the drugs themselves in wild state. I was also for some months in charge of the Lunatic Asylum of Tezpur.

2. The name bhang is applied in this province as well as in Bengal to the leaves, both fresh and dry, of the hemp plant, whether male or female, and ganja is known here as mohini bhang. I have seen both ganja and bhang plants in wild state. They look as different plants; the leaves of the former are broader and larger than those of the latter, and I have never heard of ganja plants growing from bhang seeds; charas is unknown in this province.

19. Charas is not at all used in Assam. Ganja is usually smoked, but is also occasionally drunk mixed up with milk and sugar after being moderated with water. There is, as far as I know, no speciality as to places where it is so used; i.e., it is used more or less all over the province, although to a very small extent.

23. Yes, used for smoking occasionally—perhaps more so in Assam than in Bengal. Drinking of bhang, of course, is by far the more common practice in both these provinces. I cannot say if any particular class of people has any special liking for smoking it in preference to drinking this drug.

28. (a) 18 to 24 grains of ganja, which costs one 3 to 4 pice a day.

(b) There are persons who take so much as 4 to 6 annas worth ganja per diem.

Bhang is scarcely purchased in this province, the wild bhang being in use.

I have no knowledge about charas.

29. (a) Ganja is usually smoked alone or mixed up with tobacco. Bhang is usually drunk mixed up with milk and sugar. Sometimes a little black pepper in powdery form is also thrown into it.

(b) I have heard of dhatura being exceptionally taken with bhang and not opium and nux-vomica, etc.

The object of the ordinary admixtures is to make the thing palatable and also to increase its effects, and that of the exceptional admixtures is simply to increase the effects of the drugs. I have no knowledge of any such preparation as bhang massala.

30. Siddhi or bhang is usually consumed in solitude, but ganja is enjoyed much more in company than in solitude. I have no knowledge as to the consumption of charas. It—I mean consumption of bhang and ganja—is mainly confined to

the male sex and to the grown-up people, children scarcely consuming any of these drugs.

31. Yes, easily formed, and it is not difficult to break off the habit in comparison with opium. Yes; there is a tendency for the moderate habit to develop into the excessive.

32. As far as I know there are no such customs in Assam. In Bengal there are people who take bhang on the last day of Durga Puja, but this practice is never regarded as essential, and is not likely to lead to the formation of the habit or otherwise injurious.

Sadhus and sanyasis (religious mendicants), who are mostly North-Western Provinces' men, use ganja or bhang invariably for the alleged reason of concentrating their minds for devotional purposes, and this leads to the formation of the habit.

36. I don't think so.

37. The effects of the drinking of bhang are much more lasting than those resulting from ganja-smoking, but are not so instantaneous as the latter are. In other respects they are much about the same. I have had no occasion of observing the effects of charas smoking.

38. No answer.

39. I should think so. The effects of the drugs, when drunk, are more lasting, and are therefore likely to be more injurious than when they are smoked. This perhaps is due to the difference of quantities respectively used in drinking and smoking. Bhang drinking, however, is less injurious than ganja smoking.

40. Bhang is prescribed by the kabirajes for its digestive and soporific effects. I don't know if it is used in the treatment of cattle disease. Ganja or charas is never prescribed by them in any disease. Bhang is also used as anodyne both internally and externally.

41 and 42. I don't think that the habitual use of these drugs, however moderate it may be, can in any way be beneficial in the long run. The popular notion is that it proves injurious (especially the use of ganja) in the long run. The use of these drugs usually forms a depraved habit, and it is then only that a consumer feels their necessity in giving him (a) appetite, or (b) staying power under severe exertion or exposure or in alleviating fatigue.

Any of these drugs is not considered as febrifuge or as preventive of disease in malarious and unhealthy tracts. Of course they may be certainly very beneficial when used medicinally in cases of illness. But I understand these two questions to refer to moderate habitual use.

44. Yes; it is refreshing and intoxicating. It is said to allay hunger and to create appetite. In

* Summoned to attend at a sitting of the Commission for oral examination, but was unable to appear.

case of bhang, which is usually drunk, the effects usually last for hours together, but in case of ganja smoking not more than half an hour or so. There are no after-effects. Yes, the want of subsequent gratification produces longing and uneasiness in a habitual consumer.

45. It is very difficult to draw a line of demarcation between moderate use and immoderate use. As far as my experience goes, habitual consumers scarcely keep within such a bound as not to be more or less sufferers in the long run. In such cases the constitution, the appetite, and the moral sense are more or less impaired. Moderate habitual use has not, I believe, much to do with dysentery, bronchitis, asthma, or insanity.

But immoderate habitual use sometimes brings on these diseases, especially the latter. In cases of insanity personally known to me, it appeared to me to be the exciting and not the predisposing cause of the disease, and the disease pertained to the characters of mania. I have seen both permanent and temporary mania resulting from the use of ganja. In temporary cases the symptoms may be re-induced by the use of the drugs after liberation from restraint. The symptoms are in most cases those of mania, and have no speciality apart from that.

Yes, insanes having no recorded history confess to the use of the drug. I have never come across

any cases in which insanity has resulted from the use of the drug by persons suffering from mental anxiety or brain disease to relieve pain; neither am I in a position to produce any evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs, etc., etc.

46. *Vide* my answer to the question 45.

47. No, it is not.

48. My answer to the question 47 does also apply to this question.

49. Bhang and ganja are said to be aphrodisiac but I know of no instance in which any of these drugs has ever been used for this property. I cannot say if it is so used by prostitutes.

50. My answer with reference to the question, of moderate use does also apply to the question.

56. I have no personal knowledge on the subject except in cases of ordinary admixtures, such as sugar and milk, etc. Sugar at least seems to increase the intensity of the effects. I have only heard of dhatura being mixed with bhang for consumption or for administration to others, but not of nuxvomica or opium being so used.

57. I have never heard of charas being drunk or eaten. When bhang or ganja are so used, the symptoms are more intense and more lasting than those of smoking the drugs. With this difference they are the same in character.

26. Evidence of BAIKUNTHA KUMAR NANDI, Hindu Kayasth, Assistant Surgeon, Nayasarak, Sylhet.

1. From the ganja smokers and from the cases of insanity brought to me for treatment.

2. Yes; the definitions may be accepted for Sylhet. They are called charas, ganja, bhang or siddhi by the Sylhet people. Ganja and bhang are consumed in this district. Charas is not used in Sylhet as far as I know.

23. Yes; I met with a ganja-smoker who told me that bhang is used for smoking by the poorer classes of people in the Mufassal when the shop runs short of the stock of ganja.

28. (a) Cost from Re. 1 to Rs. 2 } or more.
(b) " " 5 " 10 }

29. (a) Dried tobacco leaves are ordinarily mixed with ganja to make it mild. (b) Dhatura seeds are sometimes mixed to intensify the intoxicating power of ganja.

I have heard of the bhang massala, but have never seen it, nor do I know the ingredients of which it is made.

30. The ganja-smokers seem to take special delight in smoking the drug in company. But they do not refrain from consuming when no other smoker is at hand. Yes, it is mainly confined to the male sex. But the females are not free from it. No, it is not usual for children to consume these drugs. The women of the cooli and mehtar class and the prostitutes do smoke ganja.

31. Ganja smoking is easily formed. It is very difficult to break off the habit. I know one or two cases where the consumers have given up the habit; but such instances are few. Yes; moderation grows into excess in some cases.

32. Ganja smoking is resorted to mostly by the lower class Hindus in what is called Trinath's Seva or the worship of "three-nath," i.e., Seva. This is a religious custom in which a group of

friends meet at night. The least cost of such a custom is said to be only three pice, but this limit is exceeded very often. Ganja smoking is essential and every one present will smoke. This is the first step, and most of the confirmed ganja-smokers are initiated into this baneful habit here. It is generally temperate. Pills made of bhang, dhatura seeds, sugar and milk are taken on Sarasvati (goddess of learning) Puja day by the devotees. They indulge in excess. The pill is not essential for the Puja.

36. I do not know that alcohol is being to a certain extent substituted for any of these drugs.

37. The symptoms come on later in cases of the drinking of bhang. I am not aware of any other difference in the effects of these drugs.

40. Ganja is prescribed by the native quacks in cases of cholera. A clerk in the Deputy Commissioner's Office tells me that he was given ganja to take internally by a quack when he was attacked with cholera. He was under the influence of the drug for three days, after which he was well. Ganja is prescribed in the disease of elephants, in what form and for what disease is not known to me.

41. (a) and (b) Yes, in cases of those who are addicted to the habit.

(c) I have no experience about this.

42. Not harmless, because moderate habit may grow into excess, and that continued excess may impair the nervous system and throw the mind out of balance.

44. Ganja smoking produces exaltation of the mental functions and pleasurable kind of hallucination. It acts as a stimulant, thus refreshing the system. Yes; it produces intoxication. It allays hunger and also creates appetite. Duration of effect depends on the dose. It lasts generally

about three or four hours. It produces a longing, and its want causes a sense of laziness.

45. Undermines the vigour of the body. Ganja smoking causes asthma and bronchitis. Yes; to some extent it impairs the moral sense. Yes, it produces insanity. In one case brought to me last year the exciting cause was ganja smoking. In two others there were hereditary taint of insanity from the parents. The first one is still insane and had no lucid interval since the onset, because he is always smoking ganja. I met with a fourth case in which the type is a melancholic kind of mania. The subject has taken to ganja smoking afterwards.

46. Excessive use undoubtedly produces insanity which is generally of a violent nature. There was lately a case here in which an insane caused the death of a native gentleman by striking him with a piece of wood on the head. But this insane person is not only a ganja smoker but also a drunkard.

47. One ganja smoker tells me that his father was a moderate smoker. He and his brother have learnt to smoke from him in boyhood. Both the brothers are moderate smokers now.

48. Yes; ganja smoking is common among the prostitutes for its aphrodisiac action. Yes, the use of hemp tends to produce impotence.

27. Evidence of AZHER HOSSEIN, Hospital Assistant, Gauhati.

1. I carefully questioned men who are habitual consumers of the drugs, and collected information from them.

2. Ganja and siddhi are not produced in this province. The general name of ganja and siddhi is locally known as bhang. Charas and subji are scarcely used by the people here; hence they have no particular name.

19. Ganja is used for smoking only, but it is occasionally used in diarrhoea and cholera by rustics of the villages. In Bengal the people may use charas in some other way which the native of Assam is quite ignorant of.

23. Siddhi or bhang is used in two different ways. Some people smoke siddhi, and some take it in the shape of sherbet mixed with milk, sugar, and spices, and this is sometimes used in Assam by the people in case of colic and in diarrhoea; but it is not so prevalent in Assam as in Bengal.

28. (a) One pice }
(b) Two pice } on an average cost.

29. When taken as sherbet only, black pepper and a little sugar are used; and when as exceptional, it is made a little rich by mixing milk, cinnamon, cloves, cardamom, sugar, etc. Scarcely more than a quarter of a grain of dhatura is used with the sherbet in order to make the people a little jolly. Opium, nux-vomica, cantharides, or betel-nut are not used in this part of the country, nor are they ever heard of so doing. No special bhang massala is sold in Assam except the ingredients mentioned above. Sometimes well-to-do people use castor (mirgonavi) and sandal, to give it flavour and other spices.

30. In case of solitude ganja is used about half a tola, and in company one tola; siddhi or bhang about half a tola and one tola in company. Charas is not used in Assam. The above are used by both sexes to any time of life. Females use less than males, and children below 12 years never use any.

31. Not formed easily, but difficult to break when once accustomed. It is a natural tendency, and can be developed into excessive.

32. (a) Hindus at the time of smoking the above drugs make some offerings by *mantras* to Siva, saying "Bom, bom, Mahadeb!" and in case of Muhammadans they invoke Khuda or Pir.

(b) Yes, as a part of religion the sanyas's or monks must smoke ganja. It afterwards injures the constitution.

(c) Excessive.

(d) Yes, injurious.

36. No; they must take the same drug to which they are accustomed; otherwise some disease may be produced for the time being.

37. Charas is a milder intoxicating thing than ganja. When it is used, it produces dryness of the tongue, contraction of the eyes, thirst and constipation. The effects of bhang are quite different from the effects of ganja-smoking, such as when bhang is drunk or smoked the tongue is dried, feels cheerfulness, and causes the person to laugh, sing, and dance, or it acts according to the tendency of the mind.

39. If the hemp plant is taken in any form, it produces no intoxication, but it causes disorder of stomach, as it is not easily digested. When it produces no effect in the system, it is doubtful whether it will produce any symptom of insanity.

40. Unable to say if it is used in the school of native doctors for medicinal purpose, but siddhi is used by the native kabirajes in diseases of the bowels. Bhang and ganja are used for cattle diseases.

41. (a) Charas does not, but the latter two drugs create appetite.

(b) Ganja removes all these symptoms, but charas and bhang do not.

(c) Neither febrifuge nor anti-malarious.

(d) Some people use this drug during any epidemic, so as to keep their mind to some extent cheerful.

42. Moderate dose appears to be harmless, for it keeps the mind temporarily cheerful and free from anxiety.

44. Those who are accustomed to these drugs a moderate dose does not soon produce any effect as far as health is concerned. It is slightly refreshing like tobacco, but does not produce intoxication; it allays hunger, but does not create appetite. The accustomed dose in moderate quantity does not produce long effect. When there will be no effect of the drug taken, it produces the following symptoms:—Laziness, yawning, tearing from the eyes, pains all over the limbs and a strong desire to have the dose.

45. In long-standing cases the moderate use even produces noxious effect, i.e., weakens the man, and produces dullness morally, as the tendency of the mind is. Yes; weakens the constitution. Yes, it does injure the digestion. Certainly, in long-standing cases it produces dysentery, bronchitis,

and asthma. It impairs moral sense, and creates tendency to laziness and for debauchery, as the tendency of the mind is after the doses. Its effect helps the mind towards that direction to which it is turned. Yes. Insanity has always appeared as from the effect of smoking. The insanity from ganja is milder, and sometimes temporary and sometimes permanent in some cases. Melancholia as well of a violent type; in some cases permanent and in some cases temporary. Yes; it may re-induce. Yes, they sometimes confess. In case of brain disease or mental anxiety it does not give any relief. Yes, it produces insanity in a person who is naturally of weakened intellect. There are few men still in a state of insanity under the influence of ganja smoking, and they seem to be permanent and harmless.

46. Those who use the drug excessively and habitually, it may sometime in some cases produce insanity, other sickness, and poverty.

47. It is not an hereditary complication, and does not affect the children of moderate consumers.

48. The same as above.

49. So the taker of drugs says that it gives pleasure (aphrodisiac). Yes; used by prostitutes. Yes; more injurious if it is taken always for the purpose than the ordinary narcotics. Yes, causes impotence by over use of the organ under the influence of the drug.

50. Excessive use rather produces the effect more rapidly.

56. Their effects depend on the quantity of drug used according to the choice of the taker to make

it milder or stronger. Dhatura, quarter of a grain is sometimes used to induce intoxication, but nuxvomica, cantharides, opium, or betel-nut are never used as admixture for personal or other consumption.

57. Ganja for the purpose of medicine only is known to be eaten, but not for pleasure's sake.

In conclusion, the people generally contract the habit of smoking ganja and bhang generally in the following circumstances:—The people who suffer from any colic pain, to be relieved from it as a temporary measure under the influence of the drug; the professional singers to make their voices sweeter; the sanyasis and jogis to set their minds firmly in worshipping and praying; and persons of loose character addicted to sexual pleasure, as the effect of the drug is said to cause retention.

Oral evidence.

Question 1.—I passed through the Hospital Assistant Class in the Calcutta Medical College in 1871, and immediately entered the Government service in Assam, and have served here ever since. I have had no experience of insanity nor have I ever treated an insane. In Dhubri and Shillong I was Assistant Medical Officer and in charge of the lock-ups for eight or nine years altogether. My written answers are based on enquiries made after I received the Commission's questions, and not on my own experience. I had no previous knowledge of the subject. It is of no use my making any statement, because I have no experience of the effects of ganja, and in fact know nothing about it.

28. Evidence of LATCHMAN PERSHAD, Kayasth, Hospital Assistant, Manipur State.

1. Personal knowledge.
2. Charas, ganja, and bhang or siddhi. Yes; the same.
3. Rajshahi, Ghazipur, Sultanpur, and Gwalior State.
4. Same names. Yes.
5. Unknown.
6. Both.
7. It grows of itself.
11. Wild seeds.
12. I do not know.
14. None.
16. Yes.
17. Specially by religious mendicants and their disciples, as also by the middle and lower classes of the people.
18. Yes, they deteriorate and lose their effect in time, they last for two or three years. Exposure to wet causes deterioration. Precautions are to have it well dried up in sun and every precaution taken to avoid exposure to cold, and looked after each rain, and have it dried up again.
19. Yes.
20. Generally by the working classes of the people in Bengal, North-Western Provinces, and Assam, and more or less by the same classes of the people all over the country.
21. All kinds are generally used.
22. Foreign. From Hindustan.

23. Only used for drinking. Mixing with sugar, milk, and black pepper by the general public, except people of superior station in life.

24. Amongst the higher classes of Marwaris.

25. Increases.

26. (a) 20 per cent.

(b) 3 per cent.

(c) 1 per cent.

(d) 1 per cent.

27. Mostly labouring classes and religious mendicants are the regular consumers of these drugs.

28. (a) One anna or below.

(b) Two annas or so.

29. Used with milk, sugar, black pepper, dried cucumber seed, and sometimes raisins to give delicious taste. Dhatura is very scarcely used. It produces more intoxication.

30. Generally in company. Mainly confined to male sex by the grown up and healthy people. Not used by children to my knowledge.

30. (a) One easily gets addicted to these drugs by frequenting the company of consumers.

(b) Yes.

(c) Like all other intoxicating drugs, it is likely. Very rare.

32. On religious festivities it is necessary to dedicate such drugs to the idols; for instance, Sivaratri, Sri Panchami, and such other festivities, Temperate.

33. In society it is not considered immoral or a social crime. No. In higher sphere it is considered disreputable to get addicted to any sort of intoxicating drug, nor is it intended for such society. I do not know of any custom prevailing in any parts of the county of worshipping the hemp plant.

34. Certainly. It would operate very hard with the labouring classes, who, after their day's hard work, indulge in the smoke of a chillum of ganja as a good refreshment.

35. (a) I think so.

(c) By stopping the issue of large quantity of ganja at a time to consumers.

(d) Yes.

(e) Perhaps most probably.

(f) No. Certainly.

36. In rare cases in which excessive consumers, being laid up with some sort of disease or other arising from the excessive consumption of this drug, had to take alcohol in substitution of ganja by way of refreshment.

37. I don't know much of this.

38. Yes, of the three classes chur is the best in quality; then comes next round, and last the flat.

39. The best method of procedure of consuming this drug is to drink the siddhi or bhang, which is more wholesome than the smoke of ganja, which affects the brain directly, whereas the siddhi affects mildly.

40. Yes. Yes.

41. Yes.

(a) Very slight.

(b) Yes.

(c) Yes.

(d) Yes.

Almost among the labouring classes, say, 25 per cent. I mean moderate habitual use.

42. Moderate use is beneficial, inasmuch as it serves as a restorative.

43. Yes.

44. (a) Nothing remarkable, it revives their strength.

(b), (c), (d), (e) Yes.

(f) An hour at the utmost.

(g) Yes; feels little sedation.

(h) No.

45. (a) Yes; weakens the brain to some extent.

(b) Yes.

(c) Yes; in advanced ages.

(d) Yes.

(e) No.

(f) No.

47 and 48. No.

49. Yes, by some. Yes; it affects the organs of generation. Yes; excessive indulgence in this drug brings about impotence.

50. The result of excessive use of these drugs is more deplorable than that recorded in answer to the foregoing question.

51. (a) Very few.

(b) None, that I am aware of.

52. The excessive consumers get easily excited, and are apt to cause mischief to others.

53. Yes. No such case has come to my notice.

54. Yes.

55. Yes. Yes.

56. (a) Refreshment of the mind.

(b) Injurious. On religious festivities, excessive consumers of bhang are accustomed to mix dhatura seed, which is a poisonous drug, to produce immediate intoxication, the after-effect of which is deplorable, as it is a very sedative substance, and shortens life.

57. I know nothing of this.

58. I am not acquainted with the system of excise administration.

63. Yes. The existing system of issuing of these drugs in large quantities by vendors to consumers is highly objectionable for the reason that persons using these drugs have a tendency to indulge themselves in it as much as their means can afford. In my opinion some hard-and-fast rules should be introduced, and measures adopted to diminish the consumption of it, which, like all other intoxicating drugs, is more or less injurious to health.

64. I have no remark to make on this.

65. Yes.

67. No.

68. None.

69. No. According to distance from one shop to another. In no case is a shop located in a place within the radius of 100 yards from the other. I think local opinion should be considered.

70. No. Yes; duty is paid in British India, but not in Manipur State (where I am stationed), where the Excise laws have not been enforced. No; there is no use of untaxed drugs that I am aware of.

29. Evidence of BETHA RAM SURMA, Overseer, Tezpur Asylum.

Oral evidence.

I am overseer of the Tezpur Asylum. I have been in the asylum since 1881. I was jemadar up to 1884, when I was promoted to be overseer. I have had no medical training.

There are two general registers of patients in the asylum—one is called the "General Register of Lunatics," the other is called the "General Case Book." The other registers are special, viz., Hospital Register, Death Register, and Solitary Confinement and Employment Registers.

In the "General Register" entries are made from the Descriptive Roll. They are ordinarily made by the jemadar, Tuakanta Goshami, who knows English well. He copies the entries from the Descriptive Roll. I merely compare the entries made by the jemadar with those of the Descriptive Rolls; and fill up blauks if he leaves any.

He leaves blank spaces when the Descriptive Roll does not contain the required information. I enquire in such cases from the lunatics and fill in the entries. In those cases I fill in the inform-

ation with my own hand. I have the general permission of the Superintendent to do this. I asked Dr. Borah, and he said I might do this; so I always do it. I do not now ask anybody's permission in any particular case. What the lunatic tells me, I enter on my own judgment. I make the entry. I do not intimate it to the Superintendent. The jemadar has no authority to do this. All his entries are merely copied from the Descriptive Rolls.

I obtain my further information from the lunatics only. I very rarely see friends of lunatics. The lunatics are some from tea gardens, and some from other districts than this; so it is very rarely that friends come to see a lunatic. I do not examine them when they come; nobody does so. Any friend would have to go to the Superintendent for permission to visit the lunatic. But I have never heard of the Superintendent examining any friend; and I have never got any order to make any entry in consequence of any such examination. The Superintendent himself never makes any entry in the General Register. Nor does he ever alter any entry in it. Sometimes, when a Descriptive Roll has not information, we send it back to the Magistrate to be filled in under Rule 8 of the "Revised Rules for Management of Asylums in Bengal." We only send a Descriptive Roll back when the entries are left blank. If the word "unknown" were entered, we should not send it back. This has been my practice all along.

It is from the entries in the General Register that the statements in the annual report are filled up. Statement VII is filled up from column 11 showing "alleged cause" and Statement VI about type from column 9.

On looking up the admissions for the year 1892, I observe that in the case of Akhilanand (No. 12) the Descriptive Roll shows both the habits of the man and the cause of insanity as "unknown." Yet the jemadar has entered ganja smoking as the cause. He is present now, and says he thinks he must have asked the lunatic when he was received into the asylum. All such entries are made then. He has not authority to act thus. His duty is to enter what is on the Descriptive Roll.

I find that similarly the cause is entered by the jemadar as "ganja" in the cases of Mussamat

Bedoma (No. 2), and Mussamat Kitni (No. 11), though the Descriptive Rolls show the cause as unknown, and there is no mention of ganja in the papers.

I see that the jemadar has made the entry of "ganja" in the case of Uchit Ram (No. 8). The jemadar says he took it from the entry regarding habits in the Descriptive Roll. I think, on the whole, that he ought not to have done this when the Descriptive Roll distinctly said "No cause can be ascertained." But at the same time, if a man takes ganja, it is possible that he may become insane, and this is why the entry was made. It is better to enter a possible cause than none at all. The Superintendent was not told.

I find also that entries have been similarly made by the jemadar in column 11 (cause) from the entry in the Descriptive Rolls regarding habits in the cases of Sahebram (No. 15), Jagannath (No. 17), Khadu (No. 19), Chadi (No. 23), Jogai Surma (No. 28), and Mussamat Major (No. 1). The jemadar did this on his own responsibility.

In another 1892 case, that of Kristo Dass (No. 20), I find ganja entered in my handwriting as the cause. The Descriptive Roll shows smoking dhatura leaves mixed with ganja. The jemadar was sick that day, so I made the entry. I saw ganja mentioned, so I entered that. I did not think of the dhatura specially. I understood that ganja was the cause.

Thus, out of thirteen cases shown in the returns for 1892 as the ganja cases admitted that year, there are eleven in which the entries do not correspond with the Descriptive Rolls. Of these, ten were made by the jemadar on his own responsibility, and one by me. The only two cases in which the Descriptive Rolls show ganja as the cause are those of Jalim (No. 14), and Bapu Ram (No. 26).

Dr. S. Borah was in charge of the asylum in 1892. But no change has taken place in our procedure since he left in May 1893. In the General Case Book the entries at the head of each case are made by the jemadar or by me from the General Register. The history of the case after admission is all that the Superintendent writes. He writes that in his own hand always.

30. Evidence of PROSUNNO KOOMAR DAS, *Baidya, Medical Practitioner, Silchar, Cachar.*

1. The experiences which I obtained during my career as medical servant under the Tarapur Tea Company and also as an independent medical practitioner of long standing enable me to supply the information herein noted regarding the effects of the use of hemp drugs generally; but especially of ganja the use of which is chiefly prevalent in the district of Cachar.

2. Dr. Prain's definition can be accepted for the province of Assam. The dry leaf of the male plant whether cultivated or uncultivated is locally known by the name of bhang or patti. The word siddhi is not in use in the district of Cachar. Charas is not in use generally and there is no license for its sale here. A few up-country people who use the drug import it from elsewhere. The three varieties mentioned by Dr. Prain are used here, although flat ganja has the largest consumption. The round ganja is used by a few Hindustani or up-country coolies and the chur ganja only

by poor people who buy it in very small quantities. Distinction in the name is made much more by the licensee than by the consumers. All the three varieties are designated by the latter under the general term ganja.

19. Ganja is generally used in smoking. Habitual consumers chew it sometimes like betel-nut. Occasionally it is made into a beverage with milk, sugar and spices, etc. The first method however is the prevailing one in the district. Charas as has been mentioned above is used only by a few up-country people who import it from other districts.

23. As far as my experience goes I have not found bhang being ever used for smoking.

28. The average per diem is about half a tola worth about 1 anna 6 pies.

The general average for habitual consumers is about half a chatak worth 7 annas 6 pies. In

rare cases the average rises up to one chattaek which costs annas 15. I knew of a consumer who required sometimes more than a chattaek, but that was an exceptional case.

29. (a) Ordinarily dry tobacco leaf is mixed as an ingredient in preparing a chillum of ganja. Some people (up-country men generally) use *molla* as a substitute in filling up the chillum with ganja.

(b) The other ingredients mentioned in the question are not used here. Some people are suspected to mix dhatura to make the drug strong, but that is done privately. Tobacco leaf is mixed with the object of making ganja burn well in the chillum and also to make it more tasteful. Bhang massala is not known nor sold here.

30. Ganja is generally smoked in company. In rare cases females (generally prostitutes) are found addicted to ganja smoking, otherwise it is confined to the male sex. It is not confined to any limit of time in age. Tea garden coolie children sometimes smoke ganja, but that is not an usual practice.

31. Habit is not easily formed. It is difficult to break up. Moderate habit does not generally develop into excessive. At least there is no such tendency in the use of these drugs.

32. The use of siddhi or bhang is considered essential on the fourth day of the Durga Puja, the day when the worshippers bid farewell to the goddess. It is usually used also on the Sri-panchami Puja day. Ganja is prepared in chillums and offered to the god Siva and Trinath and afterwards the company of consumers assemble and smoke it by turns. Generally on such ceremonies, which are purely religious, the quantity used varies according to the number of consumers assembled. In the Surma Valley ganja is offered also in the name of Pir (Muhammadan saint) for the benefit of the cattle.

36. I know of one or two cases in which ganja or bhang has been substituted for alcohol, the latter being more expensive; but I am not aware of a single instance in which alcohol has been substituted for ganja. Ganja smoking is looked upon by the middle and higher classes as a degradation, and it is naturally confined to the lower classes, and as they can hardly afford the cost of alcohol they scarcely choose to change the habit.

37. Both charas and ganja produce instantaneous effect in making the smoker intoxicated. The intoxication under the effect of the former is however stronger. Bhang acts slowly and its intoxication lasts for a longer duration. All these drugs work upon the brain, and the consumer instantly after the use feels a whirling sensation all around, and his optical nerves are affected also to a great extent. The eyes generally shrink after the effect has been produced and the consumer sees before him a cloudy space filled in with moving branches of yellow flowers similar in shape to those of the mustard crop.

39. Smoking, in whatever method it may be, is more injurious than drinking. Bhang is a cool drink and when moderately used it improves diges-

tion and general health of the drinker. It has no tendency to insanity, but smoking ganja, if carried to an excess, produces temporary insanity by affecting the brain.

40. The native physicians use bhang with other medical ingredients to make different kinds of stomachic and nervous tonics. It is used more especially in dyspepsia.

Bhang is used also in the treatment of cattle disease when horses or ponies suffer from *kurkuri*. Bhang is prescribed with other carminatives.

41. Moderate use of these drugs is beneficial.

(a) Digestive.

(b) Gives staying-power and alleviates fatigue.

(c) Are anti-malarious.

(d) Improves general health and weight.

44. Moderate use is refreshing. Produces intoxication. Does not allay hunger, rather increases it. It creates appetite; generally the effect lasts two or three hours. There are no after-effects after moderate use. No longing or uneasiness is felt.

45. Moderate use does not produce any noxious effect. The constitution is not impaired. Does not injure the digestion or cause loss of appetite. Does not cause dysentery, bronchitis or asthma; rather moderate ganja smoking allays hard breathing in asthma. Moderate use does not impair moral sense or induce laziness, rather a moderate smoker can concentrate all his attention to a work undertaken, and can labour harder. Does not deaden intellect or produce insanity.

46. All the evil effects mentioned in question 45 are caused by the excessive use of these drugs. The insanity produced is exciting and temporary.

47. The habit is not hereditary and the children of a moderate consumer are not affected in any way.

48. Even in excessive use the habit is not hereditary, neither are the children of an excessive consumer affected in any way.

49. The drugs are used more with the object of getting intoxication than for their aphrodisiac effects. The prostitutes also use for the same purpose. I do not know of hemp ever causing impotence.

50. Excessive use may cause impotence, but no such case has come to my notice.

56. I am not aware of any of the substances mentioned being ever used as admixture with ganja or other drugs.

57. I have never known of charas being ever drunk or eaten. Ganja is rarely eaten or drunk. Eating and drinking act more slowly than smoking.

In conclusion, if the use of any of these drugs be checked, or restricted, the use of alcohol will correspondingly increase, which will impoverish the poor people who generally satisfy their desire for intoxication by the use of these drugs.

31. *Evidence of KRISHNA CHANDRA SANYAL,* Brahmin, Medical Practitioner, Sylhet.*

1. I am a native of Rajshahi, where hemp drugs are cultivated. I have in my professional experiences come across with patients who are addicted to hemp drugs. I had an up-country servant for some time who used hemp drugs.

2. Yes. Ganja, bhang, and charas.

3. Rajshahi, Jaintia Hills, Laur in Sylhet. In Rajshahi it is abundant.

4. Ganja, bhang, and charas. Yes.

5. I have no definite idea about it. Possibly it grows better in marshy soil.

6. Dense.

7. No.

10. No special class.

13. Yes. All the districts of the province.

14. No.

16. Yes; I have seen in Rajshahi. Possibly bhang can be prepared from the hemp plant wherever grown.

17. I know only of bhang made by all classes.

18. I know bhang deteriorates and possibly loses its effect in time. It keeps good a year. Cold and damp cause deterioration. The leaves may be packed up and kept at a place free from moisture to prevent deterioration.

19. No. Ganja is used in the form of pills or drink in Sylhet, where people generally do not distinguish between ganja and bhang. Charas is used in sweetmeats at Rajshahi and Berhampur.

20. Ganja is used by the lower classes, middle classes, rarely higher classes. Charas is unknown here. At Rajshahi middle classes use charas; but a greater proportion of the middle and lower classes use ganja.

21. Flat.

24. In Bengal the middle and upper classes generally drink bhang. In the North-Western Provinces eating of bhang pills in sweetmeat prevails. Drinking of bhang is the ordinary form of use.

25. The use of bhang is on the decrease and has been replaced by that of alcohol. The middle and higher classes of men, in imitation of the West, have mostly renounced bhang and taken to the whisky bottle. The use of ganja is on the increase. The lower classes who use it are growing more luxurious than before.

26. (a) Out of ten persons, eight consume ganja, two siddhi.

(b) Ditto.

(c) The proportion is equal between ganja and siddhi consumers as five to five.

(d) Ditto.

27. (a) Working men, fishermen, bearers, mendicants are moderate habitual consumers of ganja and siddhi. They take to them on account of the damp and cold they are subject to. Each of the drugs, specially ganja smoking, has staying power.

(b) Sweepers, some mendicants, Doms, licentious youths, etc., take to habitual excessive ganja smoking.

(c) Upper and middle class men consume ganja and siddhi in company of friends in festivities.

(d) Higher, middle, and lower classes on bereavement, in festivities, and as an anodyne to kill pains. Ganja and siddhi are taken too.

28. (a) Ganja costs half an anna per day.

(b) Four to six annas per day of ganja.

29. (a) Dried tobacco leaf with ganja, and milk and sugar with siddhi.

(b) Dhatura with both ganja and siddhi.

Dhatura is used to increase intoxicating power. No. I do not know bhang massala.

30. Habitual moderate consumers of ganja and siddhi practise in solitude. Excessive habitual consumers practise in company. The number of the former is greater than the latter. No prostitutes use ganja. Siddhi and ganja are indulged in from youth to any time of life. The habit is contracted in youth. Children do not consume.

31. (a) No.

(b) Not without uneasiness.

(c) Ganja has this tendency; siddhi slightly so.

32. In Bengal people drink siddhi on Dasara day. It is not socially binding. There is no social or religious injunction as to the consumption of ganja or siddhi. Mendicants use either or both of them to procure abstraction of mind for the purposes of deep meditation. It is generally temperate. Yes, it is likely to lead to the formation of the habit.

33. As disreputable, except in the case of mendicants who do no mischief to any one. Siddhi is supposed to increase intelligence; ganja drives away the star of fortune. The sentiment is due to health and morality. I don't know any custom of worshipping the hemp plant.

34. For some time, of course. But they can quite get rid of the habit in a month or so. Habitual moderate consumers and habitual excessive consumers will be mainly affected; they form the larger number of consumers. Occasional moderate and excessive consumers will not suffer any privation by altogether renouncing the drug.

35. (a) Not quite feasible.

(b) Probably so.

(c) By restricting the cultivation and sale of hemp drug.

(d) Some uneasiness and murmuring for a time.

(e) No.

(f) To some extent, of course.

36. Siddhi, in days gone by, used to be drunk by the upper and middle classes, who having now been saturated with Western civilization find alcohol a better substitute.

39. No; because smoking carries its injurious effect more rapidly and directly into the brain than the drinking of the same drug does. The narcotic action is moderated in its way through the stomach and alimentary canal. I refer to ganja and siddhi.

* Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

40. The Hindu school of medicine use bhang in diarrhoea, dysentery, and some diseases of the lungs; and prescribe ganja in menorrhægia. Bhang is used in the diarrhoea of kine and dogs.

41. (a) Not a food accessory, but a digestive.

(b) Yes.

(c) I do not think.

(d) Ditto.

Cultivators (Hindu), fishermen, working classes at large. Moderate habitual use of ganja.

42. Not harmless. The temporary benefit is counterbalanced by the permanent evil. The use of any of these drugs acts on the brain and nervous system.

43. Generally so; but not at all times.

44. (b) Yes.

(c) Yes.

(d) No; they say it increases appetite.

(e) Yes.

(f) For an hour or so.

(g) Not much; slight sedative.

(h) Yes.

45. (a), (b), (c), (d) and (e) Yes.

(f) Both, and the symptoms may be re-induced. These are boisterousness, desire to beat, kill or murder. Some confess, some not.

I know of a man about 50 years old, not very far from my house, who was a moderate habitual smoker of ganja. His head somewhat turned, and he began to smoke excessively, and was an insane in a few days, with a propensity to annoy and beat passers-by. Was sent to the Lunatic Asylum, Dacca, where he remained for about six months and made a thorough recovery. He returned home a sane man, and did not smoke ganja for some time. He then began moderately again, and again became insane, with a murderous mania. He struck a blow with a lathi in a temporary fit on the scalp of a relation of his, which

was fractured, and caused his death. He has again been sent to the Lunatic Asylum.

46. Habitual excessive consumers of ganja are more prone to commit mischief, and become more disorderly than habitual moderate consumers.

47. I refer to ganja. Physiologically it is likely that the children may also be affected.

48. Similar, but more marked effects come over children. I refer to ganja.

49. I know of ganja practised so. Yes, it is used by prostitutes. It leads to excess and nerve paralysis. Yes, it produces impotence.

50. Excessive use of ganja brings on impotency and other evils sooner.

51. Yes. Common assault, abusing, beating, common theft.

52. Dacoity, murder, severe assault, theft, house-breaking, perjury are common among excessive ganja smokers.

53. Yes; I know of one case, a man addicted to ganja smoking. He was sitting by and talking with a friend of his, when suddenly, as if in a temporary fit of insanity, he struck a blow with the arm of the chair, on which he was sitting, on his friend's head. The skull was fractured, and his friend died in thirty hours.

54. I have heard it so. (I refer to ganja smoking).

55. I have heard cases of this nature, but have never known of any. Bhang and dhatura can do it.

63. At present licenses for selling ganja are granted, without paying due regard to the wishes of the people of the locality, where shops are started for selling them in retail. There ought to be local option.

68. Yes; there are some. These houses, as far as practicable, ought to be very few and far between. For people are tempted to smoke excessively.

69. Not at all. Local opinion ought to be considered.

32. Evidence of MOULVI ABDUL KADIR, *Honorary Magistrate and Zamindar, Sylhet.*

1. I have had no opportunity of obtaining information regarding the matters connected with hemp drugs, as there is no cultivation of it in this district; nor have I any concern with those carrying on its trade here.

2. I don't know by what different names these products are known here.

3. I am informed that the hemp plant grows in the districts of Rajshahi and Rangpur.

4, 5 and 6. I cannot say.

7. No.

8. No reason can be assigned for the increase or decrease, as there is no cultivation at all in this district.

9. None.

10 and 11. I do not know.

12. No; I cannot say anything on this point.

13. I have had no information on this point.

14. These are not produced here.

15, 16, 17, 18. I do not know.

19. I hear ganja is used for smoking. It is sometimes used in preparing a liquid substance and sometimes mixed with sweetmeats for intoxication.

20. They are generally used by low classes of people.

21, 22 and 23. I do not know.

24. The people of this district do not eat or drink bhang, but men of the North-Western Provinces are known to use it generally.

25. I cannot say, nor any reason can be assigned.

26 and 27. I do not know.

28 and 29. I cannot say.

30. Generally they are used by young men; children scarcely use them.

31. Yes, as I am told. I believe that if the habit is once formed, it is very difficult to break it off.

32. According to the rites of the Muhammadan religion the consumption of these drugs is a sin,

and therefore strictly prohibited, although some Muhammadan fakirs are known to use them of their own accord. I doubt whether it is permitted by any other religion.

33. The consumption of each of these drugs is, I believe, injurious both for the society and for the religion. It is generally the thoughtless young men who catch the corruption in bad companies. I do not know if the hemp plant is ever worshipped by any sect of the people.

34. Yes; specially to the lower classes of consumers.

36. I had no opportunity of knowing this.

37, 38 and 39. I do not know.

40. I am told the use of these drugs is sometimes prescribed by native physicians on account of its medical qualities. I do not know if they are used in the treatment of cattle disease.

41. I do not know.

42. I cannot say.

43. I do not think that the moderate consumers cause any offence to their neighbours.

44. I cannot say.

45. (a) Yes, to certain extent.

(b) Yes; I believe.

(c), (d), (e), (f) and (g) Can't say.

46 and 47. I cannot say.

49. Yes; as I am told.

51. I can't say.

53. I do not know of any case.

54. Can't say.

55. I do not know. Yes, it is possible.

56 and 57. Can't say.

58. I have not done any excise work here, so I cannot give any opinion as to the excise administration, nor can I offer any suggestion for its improvement.

60. Ganja is not produced here, so I cannot give any opinion on this.

61. Charas is not produced here, so I cannot give any opinion on this.

62, 63 and 64. I do not know anything about it.

65, 66 and 67. I can't say.

68. I cannot give any opinion.

69. I think it is necessary to consult the wishes of the people before a shop is opened in any locality. I do not know whether any steps are taken for this purpose.

70. I do not know.

33. Evidence of MR. F. C. MORAN, Tea Planter, Khoniker, Lakhimpur.

1. From vendors, native doctors, and consumers.

3. I only know of Upper Assam, and that scattered.

4. It is known by the name of bhang, and is of the same species.

5. So far as I have seen it grow, Assam climate seems to suit it well.

6. Scattered, except where the seed is collected and planted.

7. No.

10. No special class; all classes alike use it.

11. Yes.

14. (a) No.

(b) No.

(c) Yes. Not to any great extent, only a few people using it.

15. Bhang, which is made from the wild plant, is used by the people mixed in its green state with tobacco and smoked, and I have never heard of its being eaten or drunk.

16. (a) Yes.

(b) Yes.

(c) No.

18. Deteriorates after a year or so.

19. In Assam used only for smoking.

20. All classes.

21. Ganja is the name given to the imported article.

23. Always smoked and by all classes.

24. Fakirs are the only people, I am told, who drink bhang.

25. Steady.

28. (a) 2 annas weight.

(b) 4 annas weight.

29. Only tobacco that I know of. I do not know bhang massala.

30. In company. Males and a few females take it. Have never heard of children taking it.

31. (a) Yes.

(b) No.

(c) Not necessarily.

33. So far as I can gather, the high as well as low class of people take it; there is no disgrace attached to it. I have not heard nor know of any form of worship to the plant.

34. No; I do not think it would be a serious privation to any class of consumers to forego it. From personal experience I have seen men who used to take it largely give it up, and felt no bad consequences.

35. I do not think it would be possible to prohibit the use of the drug, as it grows wild, and habitual smokers could always arrange to get a supply.

38. 1. Bhang. 2. Ganja. 3. Chur; this is the strongest.

39. Smoking is less harmful than drinking.

40. Bhang and ganja are taken for dysentery, catarrh, colic, etc. No, they are not used for cattle disease.

41. (a), (b), (c) Yes. Moderate occasional use.

43. Yes.

44. (b) It is refreshing.

(c) If taken to excess, same as other drugs.

(d) No.

(e) Yes.

(g) No.

(h) No.

45. (b) No.

(c) No.

(d) No; the reverse.

(e) It induces habits of immorality and debauchery.

(f) Yes; it does, if taken to excess for a long period, produce insanity, but of a temporary character, and can be checked or cured, so far as I have seen, from forced abstinence. Insanity may be re-induced by use of the drug. I know the case of a cooly on my tea garden who was temporarily insane from using the drug, was kept in the Lunatic Asylum at Tezpur for six months, returned quite cured, and has had no relapses since.

(g) Have no information, but there is evidence that insanity may tend to indulgence in the use of hemp drugs by a person who is deficient in self-control through weakened intellect.

47. No.

48. No.

49. (a) From what I can gather, yes.

(b) Not known.

(d) Bhang smokers generally have fairly large families, say, four or five children.

53. Yes; murder. I had a case * of a man in my garden who cut off his wife's head whilst temporarily insane under the effects of the drug.

68. Yes.

69. So far as I can gather, the people are not consulted as to the site of a shop proposed to be opened if sold by public auction. I certainly think local opinion ought to be considered.

*Note by Commission appended to
MR. MORAN'S evidence.*

EMPRESS vs. LALA KAMAR.

There is only one mention of ganja in this case, and that is in the evidence of a witness, Mohidbar, who stated both before the committing Magistrate and before the Sessions Judge that the accused was sometimes "like a man who takes ganja."

On the other hand, it is in evidence (Mr. Moran) that accused and his wife "had frequent quarrels;" also (Mohidbar) that he was "imprisoned for assaulting her" on a previous occasion, two years before, on which (Puttu) "he was drunk." To this is added: "He is not a drinking man; he drinks sometimes." Mr. Moran, in a long statement made before the Magistrate giving a detailed history of the prisoner, made no mention whatever of ganja.

34. Evidence of Mr. ALFRED SPICER,† Tea Planter, Pathecherra, Cachar.

1. Twenty-five years as manager and proprietor of tea gardens in Cachar.

2. Only one sort of ganja appears, as far as I know, to be sold in the local bazaars.

3. Coolies occasionally grow a few plants. They get the seed from the bazaar-sold ganja.

5. Will grow anywhere in Cachar.

7. (a) None but surreptitiously as described in answer to 3; except the Kukis, and they bring a little to sell in the bazaar.

8. No increase.

10. Kukis and Patnies, and a few coolies.

11. No necessity to hunt for wild plants, as seed is obtainable from the bazaar-sold ganja.

13. Cultivation possible anywhere in Cachar.

14. Ganja only.

16. I have never seen bhang in Cachar. Yes, it can be prepared in coolies' houses and Kuki poonjies.

17. Kukis, Patnies and a few of various other races and castes.

18. If kept in a box will remain good for at least a year. Keeping it free from cold and wind will prevent deterioration.

19. Ganja only for smoking is used with leaf tobacco.

20. Coolies and Patnies; ganja only, in Cachar.

21. Flat.

22. No charas in Cachar.

23. Not in Cachar.

25. Ganja increases among coolies, owing to the vicinity of ganja shops and their agents, who

frequent the bazaars and sell it surreptitiously; also Kukis.

29. Ordinarily leaf tobacco. Dhatura is not mixed with it; but dhatura is sometimes mixed with the rice-fermented liquor in order to produce greater intoxication.

30. In company. Five or six will smoke together. Males principally take it. Females very little. Children under ten do not smoke.

31. Yes. They can break it off.

32. It is not necessary for their social and religious customs, but both bhang and ganja are sometimes used.

33. To take ganja is rather looked down on. No public opinion. No, the hemp plant is not worshipped.

34. No, it would not be a serious privation. Some coolies here have given it up of their own free will.

35. Prohibition would be feasible. The drug would be, and is, consumed illicitly unless the Kukis were watched. If Government stop the sale to the licensed shops, the use will gradually die out. No shop should be allowed within two or three miles of any coolie lines.

36. Coolies seem to take more alcohol the richer they get, but not as a substitute for ganja.

38. Only know of flat being used.

39. Ganja-smoking is all I have here.

40. Never heard of it.

41. (a), (b), (c), (d) No.

42. Never harmless; it maddens them if they take much, and it affects their lungs and they die of pneumonia eventually.

* See Note appended.

† Invited to attend at a sitting of the Commission for oral examination, but failed to appear.

43. Fairly inoffensive, but it must be taken very moderately.

44. It is taken to produce intoxication.

45. (b) It seems to be always injurious.

(d) It produces bronchitis and pneumonia. The Doctors state that ganja does not produce bronchitis and pneumonia, but that any ganja-smoker catching these diseases is more likely to die than others who do not indulge.

(f) It produces insanity if taken to excess. Temporary, if the ganja is kept away from the patient.

(g) No. There is no evidence to indicate that insanity may often tend to indulgence in the use of hemp drugs by a person who is deficient in self-control through weakened intellect.

47. No.

60. Yes.

63. I think the licensed shops should not be allowed near to coolies' houses. They should be at least two miles away and confined to only the large bazaars.

68. I would never allow such houses. It is bad enough when it is sold for consumption elsewhere, but it would be a great deal worse if ganja were consumed where sold.

69. Wishes of the people are never consulted. There is a shop at our shipping ghat at Tikulpar, and the manager of Tikulpar and every manager whose tea is shipped there must consider it a nuisance.

35. Evidence of MR. JOHN PHILLIPS, Tea-planter, Suffry, District Darrang.

I have pleasure in giving you the extent of what information I have been able to collect regarding the use of bhang in this part of Assam.

Cannabis indica, Indian hemp, bhang, siddhi. Products called ganja, charas, majum.

Used extensively in all forms by imported coolies as well as by indigenous population. It is the cheapest and most convenient intoxicant procurable, and is credited with aphrodisiac properties which make its use attractive and is the cause of its being used first.

Imported coolies use the drug, about three out of four. It is smoked with tobacco or drunk with water, sugar and milk.

Its use is general amongst the coolies in this estate, who are all imported. Moderation is the rule. Excess is very exceptional.

I have no indigenous labourers, but have had a long experience of Assamese of all classes. They use the drug, but not so extensively as imported labourers from Bengal and other parts of India, as they are more outwardly observant of rules for conduct laid down by the priest class and more afraid of the penalties which follow their infraction.

The form in which bhang is most generally used is what may be called home-made. The leaves, stems and young shoots are all used. The nearest licensed shop is four miles off and the retail price is six annas a tola. This shop is the only legitimate source of supply to factories employing about 6,000 imported labourers and a scanty indigenous population. The licensee pays Rs. 1,200 a year to Government, so that his profits must be considerable, due no doubt to surreptitious sales at markets and shops in the neighbourhood, which is not permissible by the terms of his license. The price, however, is so high as to stimulate consumption of the home-made and prepared article.

The plant is to be seen everywhere, not purposely cultivated, but apparently self-sown and tolerated as a weed. It would be impossible to extirpate it or stop its growth without a large increase to the staff at disposal of administrative affairs, and such addition to oppression and malpractices as would be intolerable to an otherwise peaceable and law-abiding populace.

Character and effects of indulgence:—Great excitability followed by some stupefaction; the effect soon wears off with moderate consumers.

After a debauch the effect is more stupefying and lasting.

Many natives endeavour to conceal from Europeans the habit of taking bhang, opium or liquor, because they think the knowledge would harm them, not that they have any idea of shame in the matter; so our opportunities of knowing who do and who do not use these stimulants are not great, although tea-planters are brought into more intimate association with natives of the lowest classes than any other community. As a rule, the knowledge is only attained when excess has produced certain effects, i.e., violence of conduct, extra stupidity or insolence from over-excitement. Enquiry follows and the knowledge is obtained. I have had as good opportunities as any one who has resided for many years in Assam, but I cannot say that I have yet got behind the life and habits of the natives of India amongst whom I have lived. I now accept the habit of deception which I have found ingrained in the people and do not seek to gain information which is not volunteered.

I am told that a quarter of a tola is about the standard for daily consumption by a habitual consumer, but I have no personal knowledge.

I have known of no harm done by the consumption of the drug other than such violence as follows excess of passion. Bhang has appeared to incite or rather accentuate the desire to use extreme violence when passion is roused, and I have known a few cases of temporary madness, say, ten, during over 30 years' residence in Assam, which have been attributed to immoderate excess in bhang. I have known of no special disease attributed to its use, but bowel complaints, weak lungs, and irritable stomach have been said to result from the habit as from excess in use of any other stimulant, and those habitually addicted to its use are said to be less amenable to remedies than others who are temperate.

Amongst my own coolies the users of stimulants, such as bhang, opium or liquor, are as good if not better than those who abstain. This statement is general; I cannot make it special.

Comparing liquor with ganja. The liquor available is of the worst possible description, i.e., fresh distilled—raw spirit made from fermented "mohua" or "gur" and the fermented "laopani" made intoxicant by addition of indigenous drugs easily obtainable by any one making a brew. The result of debauch or excessive consumption of

these liquors is constantly apparent in mortality from choleraic diarrhoea, dysentery and pneumonia, probably owing to exposure to cold when stupefied by drink; but with all these drawbacks I would not restrict the opportunity of all who desire to use the stimulants, as the freer they can be obtained the less likelihood is there of over-indulgence on special occasions. With bhang these sequences are not brought home to one in the same way, so I think its hurtfulness, if it exists, is less. Please observe that our people have no opportunity of having what may be called sound good liquor to drink, and the fiery stuff offered by the distilleries as soon as it is made is dear as an intoxicant compared with bhang and opium, and it is for its results that a coolie takes a stimulant at all. He gauges its value by the effect produced for the money.

Liquor of the above description gives us the most trouble, has the more injurious effects on the individual, and on the labourers collectively.

I advocate no prohibition on ganja. There is no crying evil of any magnitude justifying interference with the habits of the people, and if prohibited, the health of our coolies would suffer and

their lives would be sacrificed, and of course discontent would ensue.

The only improvement which suggests itself to me is that greater conveniences might be offered for the purchase of the drug were it not that the weed and its preparations are already within reach of any one who wants to get them. Nagas, Assamese, imported village squatters and even factory residents all have a never-failing supply at their doors. I think the price at which it is sold at the licensed vendor's shop is as high as the people can afford to pay for it, and at the same time too high for excessive indulgence as a habit.

It is of no use to suggest a limit of purchase, as it would be practically impossible to enforce it, but nominally one should be laid down, if it is not so already, and any proved case of over-selling the limit to any one individual, especially to one already under the influence of the drug, should be severely punished; but these conditions apply equally, if not more, to the sale of spirits and opium, and I do not advise them with special reference to bhang, charas or ganja.

The plant is not used for any other purpose in Assam.

36. Evidence of MR. W. SKINNER, Manager, Tezpur and Gogra Tea Company, Bindukuri, Tezpur, Darrang.

I have to thank you for your letter of the 21st ultimo, which I regret not to have answered before; but your memorandum necessitated some enquiry, which has been the cause of delay. I may premise my remarks by stating that I have nearly 22 years' experience with coolies, and until your visit to Assam, I have never known that any of my coolies used ganja. This fact certainly goes far to prove that there can be little harm in its use; for though I have very often had trouble with labour owing to drunkenness, at no time has ganja been the cause of quarrels or insubordination.

You may remember that Mr Anderson, in his examination in Tezpur, mentioned having met that morning a planter, who informed him that none of his coolies used the drug to his knowledge. At that time I believed this to be the case. Since, I have made searching enquiry, and find that out of some 1,600 souls employed on this estate, 60 use it in varying degrees. Of these 60, all men, I find—

2	who	take	8	annas	worth	and	more	a	week.	
9	"	"	4	"	"	"	"	only	a	week.
49	"	"	2	"	"	"	"	"	"	"

The castes who use it most and form the largest proportion of those smoking it are Moosoahs from Gaya and Chapra. Three are Musalman bricklayers from Calcutta, and of the jungli caste such as Mundhas and Southals; only eight are known to consume it. I can only point to one man, who is debilitated and of poor physique, and who admits that ganja is the cause. He is the heaviest consumer of the drug of those enumerated, and, though quiet and peaceable, is of very little use as a coolie. All use the excisable drug, but some Moosoahs admit that when sent to the

villages for bamboos they collect some of the wild bhang, and after drying it, use it when they cannot afford to purchase the better article, or mix it with the bought drug to make the latter go further. They all take it in the form of smoke.

The wild bhang is found everywhere, comes up of itself, and in April and May often quite covers the "baris" of Assamese villagers. They make no use of it whatever, and in most cases it is ploughed down as jungle, though if not, when the rains set in, it dies down of itself. There seems to be a Hindu festival kept by the Assamese called Sivaratri, when the Gosains make sweetmeats with ganja or sometimes wild bhang, and then each devotee who visits the shrine has to partake. This is also sometimes given in the form of a liquid, being mixed with milk and sugar.

So far as my experience goes, and from the enquiries made, I cannot say there is any harm in the use of the drug. All those who appear to use it are good, quiet, and willing coolies; and the drug certainly, save in the one case named, seems to have no deleterious effect. With regard to the wild plant, it is very harmless; its action is almost *nil*, and it is used, as I have said, only when the want of funds prevents the purchase of ganja. Its extirpation would be very difficult and costly, while from its innocuous qualities it would hardly be worth attempting.

I hear there is a case of a lunatic who was in the Tezpur Asylum and said to belong here, whose lunacy was ascribed as due to ganja-eating. The man I know, but he never belonged here, and was merely employed as a ticea carter, and lived some distance from here, and so I know nothing of his habits.

Trusting these facts may be of some service to you.

37. Evidence of MR. G. A. DOLBY, Tea Planter, Modopce, Tezpur.

Ganja is not very extensively used in this district, and bhang only on occasions.

There are over 500 imported coolies on this estate. I would put down the proportion of habitual smokers at 20 per cent. Women never use it. It is generally smoked.

Assamese and Cacharis, whom I would term indigenous labourers, are not ganja-smokers. Very few smoke it. Would estimate the proportion at 2 per cent. in the villages, and say 7 per cent. in stations.

On occasions, such as the Sivaratri Puja, Assamese use bhang mixed with milk, sugar, and flour made up like sweetmeats, when all present partake of it, even women and children. A few well-to-do Assamese drink bhang made up like sherbet, with milk and sugar, not to intoxicate, but as a refreshing drink and to do honour to the guest.

I have made careful enquiries to enable me to give you accurate information on the following points: so far as my own coolies are concerned, I would put the proportion of non-smokers at 80 per cent.; of habitual smokers who use it in moderation at 18 per cent.; and 2 per cent. of those who use it to excess.

Ordinarily, I should say, the drug is used in moderation and not to excess. We are daily coming in contact with our coolies at work, and have many opportunities of finding out the cause of their illness when in hospital and also when they absent themselves from work. I have noticed the few who take the drug in excess have a wild look, their eyes are generally bloodshot, and their general manner tends to show that they are under the influence of some intoxicating drug for the time being. I have found those who use it in moderation work better under its influence and are more light-hearted and cheerful; these very men would work indifferently if prevented from using it, and I believe would suffer from indigestion and other bowel-complaints; it must therefore act as a tonic and a digestive if used in moderation by habitual smokers.

I have two or three cases of asthma on this estate which, I believe, is chiefly attributable to the

excessive use of the drug. These men were moderate ganja-smokers, but have of late years used it to excess; they are unable to do any hard work; they were able-bodied coolies some years ago; asthma is not prevalent among non-consumers. I cannot attribute the general debility of these men to any other cause.

The wild plant grows luxuriantly in most of the villages in this district. It is fond of a rich light soil, and can be seen growing with vegetables in most of the gardens belonging to the villagers. The plant generally dies away on the approach of the rains. Those who have used it say it causes nausea and headaches. It is seldom used; otherwise the consumption of ganja would be *nil*. It would be as difficult to exterminate this plant as the "Lantana" plant would be in Ceylon, and would not be worth while to extirpate it.

It would be difficult to compare liquor with ganja: they have such opposite effects on the individual who drinks the first or smokes the other. Either taken in moderation does little harm. Of the two evils I would vote for ganja so far as work is concerned. I have generally found those who drink liquor suffer temporarily more than those who smoke ganja. By this I mean coolies seldom drink in moderation, and naturally feel the bad effects next morning. Liquor has not the same injurious effect which ganja has on those who use it to excess.

I would not advocate the total prohibition of ganja. So far as my experience goes, I am of opinion that it should not be interfered with. It would be a pity for the sake of a few who take it to excess to deprive the labourer of an indulgence and to him a luxury. There would be a feeling of discontent if those who used the drug were deprived of it.

It would be difficult for me to suggest any measure to restrict the sale of the drug; I believe the present system to be a good one. It would be practically impossible to limit the sale or use of the drug, and I doubt if the licensed vendor would endeavour to prevent it. Those using the drug could easily purchase the quantity required by evasion and fraud.

I hope the above will be of some use to you.

38. Evidence of MASDAR ALI, Pleader, Sylhet.

1. I have been a pleader of the District Court from December 1885. Before this I was Sub-Inspector of Schools, Midnapore. I have been Vice-Chairman of the Sylhet Municipality for three years, and will complete my term of office as Chairman of the same Municipality in March next.

2. People here smoke only ganja which is imported. Yes. Flat ganja is known as *chipti*. Round ganja is known as *gol*. Broken ganja is known as *chur*.

7. No.

14. No.

18. Ganja deteriorates by keeping. It quite loses its effects in time. It keeps good for about a year.

19. Ganja is here used for smoking only.

20. Ganja is smoked by fishermen, boatmen, cultivators, palanquin bearers, day-labourers, certain fakirs and sanyasis.

21. Flat is preferred, because it is cheap; otherwise *chur* is preferable.

25. Neither is remarkable.

26. (a) Three-fourths.

(b) One-fourth.

(c) One-eighth.

(d) One-sixteenth.

27. (a) Fishermen, boatmen, palanquin bearers, cultivators, and day-labourers.

(b) Fakirs, sanyasis and people suffering from incurable maladies.

(c) People observing Sivaratri or Janmasthami or other Ekadasis or fastings, or desirous of pleasures.

(d) Any of the above under exceptional circumstances—

- (a) Hard work, exposures, etc.
Vagrancy, idleness, disease, etc.
Orthodoxy or pleasure.
Various.

Two to four pice.

three to eight annas.

(a) Tobacco; (b) Betel-leaves; dhatura mixed. The object of these admixtures

(a) For preventing the ganja from burning too soon and neutralizing dryness or pungency.

(b) Is used to enhance the effect.

30. Mostly in company. From the age of 15 onwards. Children very seldom.

31. Habit is easily formed. It can with difficulty be given up. Yes. There is a tendency to excess.

32. The sanyasis and Bairagis take to ganja as is said Siva was fond of it. But there is no social or religious custom. It is generally excessive. It leads to the formation of the habit. It is injurious so far as it brings on bronchitis or dysentery, and increases idlers in the society.

33. It is regarded as disgraceful. The Muhammadans look upon it as sinful, as all intoxicants are forbidden in the Koran. Ganjiri or ganja-khor are terms of bitter contempt, meaning unreliable, irreligious, good-for-nothing people. In the case of lower class people, it is looked upon with indifference as they smoke ganja out of their necessity.

34. Yes, it would be so to the consumers mentioned in (a), question 27. The others can bear the privation.

35. (a) Not all at once

(b) Yes.

(c) Very difficult.

(d) At first it would.

(e) Would not amount to a political danger.

(f) Yes.

40. Yes, they are prescribed by native doctors

41. (b) Yes. Class (a) in question 27 use it for the purpose mentioned in (b) of this question.

Both the moderate habitual and the moderate occasional use is referred to.

42. It is beneficial and harmless to class (a) in question 27. Or else it is harmful. It leads to excess and brings on diseases, etc.

43. Yes.

44. (a) It stimulates the system, and makes the consumer talk a good deal. But it makes the idler morose.

(b) Yes.

(c) and (d) Yes, slightly. It allays hunger also.

(e) Yes.

(f) The effect lasts for about an hour or so.

(g) There are after-effects noticeable in the idlers.

(h) Yes.

45. (b), (c), (d), (e) These are seldom noticeable in the case of class (a) in question 27.

46. This often produces noxious effects of all kinds.

47. No, as far as I know.

51. Yes. It is the formation of the character that leads to ganja-smoking; the converse is much less the case.

63. In the present state of society the existing system is the best.

68. Yes. There are licensed shops. They ought to continue.

39. Evidence of BABU ABANTINATH DATTA, *Kayastha, Pleader, Judge's Court, Cachar.*

1. In my earlier days I was constantly among several confirmed ganja-smokers and had no alternative but to mix with them. I saw them preparing and smoking ganja. Moreover, when I entered the world, I had to deal with many ganja-smoking people. My observations are restricted to the districts of Sylhet and Cachar.

2. My knowledge is limited to the use of ganja only. I have never seen people using bhang and charas, and therefore have not had opportunities of forming any opinion in regard to the use and consumption of these drugs. The definitions of the three varieties of ganja as given here may be accepted for the districts of Sylhet and Cachar. Flat ganja is called chipti, and round ganja is known under the name of gol ganja. Chur ganja has no other name in these districts.

3. The hemp plant grows spontaneously in Sylhet and Cachar.

5. I do not feel competent to answer this question.

6. The growth of the wild hemp is scattered.

7. The hemp plant is not cultivated in Sylhet and Cachar.

14. Ganja, charas and bhang are not prepared in the districts of Sylhet and Cachar.

19. My experience is confined only to ganja. As far as my experience and observation extend, ganja is used only for smoking.

20. The lower classes of people smoke ganja more largely than the upper classes. Those who get into this habit are invariably low class men. Among higher classes this habit is to be found among those whose education has been neglected. The use of ganja is also noticed among another class of men who are addicted to hard-drinking. It is a very common vice among the singing party. The ascetics as a class indulge in ganja-smoking. It is difficult to make an estimate of the number of ganja-smoking people, but regard being had to the large population, one could say that ganja is smoked by very few persons. Ganja-smokers will be found all over the districts.

22. The use of charas has never come under my personal notice.

23. Bhang is never used for smoking.

25. The use of ganja is on the decrease. The policy of Government affords a check against the free use of ganja, and has raised the price of the drug, and hence, in my opinion, the consumption of ganja has been decreasing.

26. It is difficult to distinguish between the proportion of the different classes of consumers of ganja. The great majority of consumers of ganja are habitually moderate as far as my experience goes.

27. The excessive consumption of ganja is the largest among the ascetics and those consumers who are in the habit of hard drinking. The rural classes and hard-working people are generally moderate in its indulgence. The number of occasional moderate consumers is very few. These belong to those classes of people who would not smoke ganja without putting in offering to Mahadeb, a deity of the Hindus. The cases of occasional excessive consumption are few and far between.

Some got into the habit of ganja-smoking for pleasure, which its intoxication brings on. Some began it under a belief that it gave them strength and enabled them to go through hard work; but the majority started the habit from the contagion of bad examples.

29. Water and tobacco are the ingredients ordinarily mixed with ganja by different classes of consumers, but rosewater and milk are exceptionally added to it. I have not seen any one using dhatura with ganja.

30. As a general rule ganja is smoked in company. Ganja-smoking is mainly confined to the male sex. Our women are remarkably free from it. It is quite uncommon among children.

31. Ganja-consuming habit is easily formed. It is difficult to give up the habit of consuming ganja. The consumers cannot give up the habit of their own will, but they would do so if compelled to it. It creates a hankering after it. There is a tendency for the moderate habit to develop into the excessive.

32. Ganja is used on the occasions of Sivaratri festival and Sarasvati Puja. It is generally used on these religious festivals, but it is not regarded as essential. *Trinathar Seva* is a religious entertainment among low class men of Sylhet and Cachar. This *Seva* is usually celebrated in fulfilment of promises made for the purpose especially when anyone be in trouble. It takes place at night. The ganja-smokers as well as spectators meet together at the appointed hour and employ themselves in celebrating the so-called fête. They put ganja in offering to Mahadeb, a deity of the Hindus, who, it is said, used to smoke ganja, and then invoke him to come and share the offering; when the invocation is over, the ganja offered is smoked by the consumers and some of the spectators who profess themselves to be the followers of the deity. This is followed by distribution of sweetmeats and fruits among the spectators as well as the smokers. Ganja is essential in this *Seva*, and it is likely to lead to a habit. The moderate and excessive use of ganja on this occasion depends on the nature of the consumers.

33. The general feeling of the people is against the use of ganja. The term "ganja-smoker" is a term of reproach. Even the ganja-smokers are ashamed to admit the habit of ganja-smoking; but it is not regarded as a degrading habit when contracted by the ascetics. It is said that Mahadeb, a deity of the Hindus, used to smoke ganja, and his followers consider the smoking of ganja to be a sort of religious service. Ganja-smoking is generally confined to the dregs of the society and is looked down upon by the respectable people. The ganja-smokers are considered to be useless

members of society, because the habit of smoking ruins mind and body. I therefore attribute that sentiment to this. I am not aware that hemp plant is ever worshipped on any occasion by any sect of people.

34. Yes, it would be a serious privation where the habit of using ganja has become established. I have noticed restlessness and depression in the ganja-smokers, and found them to be quite unfit for work when deprived of their accustomed use of the drug.

35. It would not be feasible to prohibit the use of ganja. Any attempt to restrict its consumption would lead to smuggling and the clandestine sale of the drug (ganja), and the people would consume ganja of inferior quality. It would be very difficult to enforce the prohibition. The prohibition would cause, I believe, discontent among the consumers; but I am not prepared to say that it would amount to a political danger. If the consumption of ganja be prohibited, the poorer classes will, I believe, take to other drugs, and the richer to alcohol. The prohibition could be enforced by stopping cultivation, manufacture and importation of ganja.

36. As far as my experience goes, the tendency of the people to indulge in liquor has become very great at the present time, but I do not think that the people take to it as a substitute for the drug (ganja).

42. My observation is confined only to ganja. The moderate use of this drug is not, in my opinion, harmless. It makes man quarrelsome and irritable and produces emaciation, and causes bronchitis or asthma in old age.

43. So far as my experience goes, moderate consumers of ganja are inoffensive to their neighbours.

44. I am not a consumer of ganja, and therefore I do not feel competent to give any definite answer, but I was told by the smokers of ganja that the intoxication of ganja brings on pleasure, and it gives them vigour and capacity for hard work. I have seen people eating to excess when under the influence of the drug (ganja). The labourers are more inclined for hard work after a smoke. The above effects take place, I am told, while the smokers are under the influence of the drug. They say that the want of subsequent gratification produces uneasiness and creates a longing for the drug.

45. As regards the effects of the moderate ganja-smoking on the physical and mental condition of the people, I have observed that injurious effects are produced by its moderate use. It produces emaciation, and in many cases it causes dysentery and bronchitis or asthma in old age. It also weakens the intellect and enfeebles the mind; but I was told that these deleterious effects take place for want of good food consisting of milk and its preparations, besides other articles of food, which the generality of the smokers of ganja can ill-afford to have on account of their straitened circumstances. I know of no case where ganja-smoking has produced moral depravity of any kind. No case of insanity produced by the moderate use of ganja has come under my notice. It also causes loss of appetite, and injures the digestion unless accompanied by good food, and induces laziness.

46. I have observed that excessive use of ganja ruins body and mind. I have heard of several cases of insanity produced by the excessive use of the drug (ganja). Yesterday I read in

paper some cases of insanity produced by excessive use of ganja. I have also observed that excessive and habitual use of ganja has produced the aforesaid noxious effects within a shorter period of the indulgence.

47. The habitual moderate use of ganja does not appear to be a hereditary habit. I think it may affect the children of the moderate consumers when its use causes bronchitis or asthma.

48. The habitual excessive use of ganja too does not appear to be a hereditary habit, but, in my opinion, it will affect the children of the consumers as it causes bronchitis or asthma.

49. I do not feel competent to give any answer to this question.

51. I cannot distinguish between the proportions. I have never heard of any connection between crime and the moderate use of ganja.

52. The excessive use of ganja seldom leads to crime.

53. I know of no case in which the use of ganja was the direct cause of crime. I have never seen nor heard any man committing unpremeditated crime of violence under the influence of ganja.

54. I have never heard of any case in which criminals used ganja to fortify themselves to commit a premeditated act of violence or other crime.

57. I have no knowledge of charas, but, as far as my experience and observation extend, ganja is never eaten, but it is always smoked.

58. I think the present system of Excise Administration in Assam in respect of hemp drugs is on the whole the best, and, in my opinion, it is working well. The weak point in it is that Government does not take middleman's profit. In this respect it is capable of improvement.

59. In my opinion the Excise system is capable of improvement from financial point of view. Government should take middleman's profit.

40. *Evidence of BISHUN CHANDRA CHATTOPADHAY, Pleader, Dhubri.*

1. Have had to deal with many consumers and dealers of the drugs, and personally have seen the consumption.

2. The flat, round, and broken are locally known by mota, mihi, and chur respectively.

3. Hughli, Rangpur, and Goalpara. It is abundant in Hughli and Goalpara.

4. Siddhi and bhang. They refer exactly to the same plant.

5. Damp and fertile soil favours the growth. Abandoned places of cow-sheds have been seen covered with these plants.

6. Ordinarily scattered, but I have seen places where the plant grows spontaneously every year in the form of dense jungle.

7. No.

14. No. Bhang grows spontaneously.

18. All these drugs deteriorate by keeping. Ganja and bhang will lose much of their effect in a year.

19. Ganja and charas are generally used for smoking, but I have known of ganja being drunk also when bhang cannot be had or a stronger drink is required.

20. Ganja is chiefly confined to low classes of the people, while charas finds its way even among the higher classes in towns and sadar stations.

21. Chur is the most favoured of the three, but owing to the difference in their prices the consumption of the flat is the highest.

23. Bhang is used for smoking sometimes by people who have contracted the habit of smoking ganja, but cannot get it.

24. Bhang-drinking is very rare in Assam.

25. Ganja: use is gradually on the increase owing to greater facilities being offered for procuring the drug by the increased number of retail shops.

27. The habitual ganja-smokers are those who are exposed to the inclemencies of the weather, and more especially who have to work in water, such as fishermen and boatmen. Then there is another class of excessive ganja-smokers. These are religious mendicants and ascetics, who expose themselves most.

28. The average cost will be from two to four pice a day.

29. I have known of bhang drink being mixed occasionally amongst higher classes of people with rose-buds, cucumber seeds, and spices and sugar to make the drink fragrant, cool, and tasteful; and have heard of dhatura being mixed to increase the effect of ganja, but had no experience of it.

30. The consumption of ganja and bhang is freely practised in company. It is mainly confined to the males. Females, old and degraded, are occasionally seen to indulge in ganja-smoking. Children rarely consume these drugs.

31. The habit is easily formed, but it can be as easily given up. The habit continuing is, like all others, liable to develop into the excessive.

32. The religious custom of the Bengal Hindus enjoins the touching of the bhang plant leaves on occasions of distant and auspicious journeys and the drink of the drug on the last day of the Durga Puja. It is not essential. Such use does not generate habit and cannot be injurious.

33. Ganja-smoking is disreputable, it being chiefly confined to the lower classes. I know of no custom of worshipping the plant.

34. I do not think it would be a serious privation. The habitual consumers may temporarily feel a want of appetite.

35. All these drugs may be dispensed with, but not as long as we have the more pernicious liquor traffic. The spontaneous growth of bhang may tempt a few to have recourse to it, but this may be easily prohibited. There is no apprehension of a political danger, but some may take to alcoholic drinks.

36. The ganja-smokers have generally an aversion to liquor-drinking. Alcohol-drinking is gradually increasing no doubt, but I do not think that it is being substituted for ganja or bhang.

37. I have not much experience of charas; my answers refer to ganja and bhang.

40. Native physicians do prescribe bhang for bowel complaints, and ganja is used by them for preparation of certain oils. I have heard of bhang being used for treatment of cattle disease.

41. I have seen people using ganja and bhang to sharpen their appetite, but, like all stimulants, by frequent use they fail to produce the desired effect and act prejudicially on the natural system. Ganja and bhang ward off cold, but it is not taken with the intent of protecting against fever. I refer to moderate occasional use.

42. I do not consider any use of the drug harmless. The beginning of moderate use generates habit and gradually goes to excess.

43. Even moderate consumers get a very irritable and easily excitable temper.

44. The immediate effect is the satisfaction of the longing. It is refreshing. It produces intoxication. It does not supply the place of food. The effect varies with the length of the habit. The after-effects are injurious.

45. Habitual ganja-smoking impairs the constitution, injures the natural digestive functions, and the end of a ganja-smoker is death, generally of dysentery or affections of the organs of respiration.

I have known of instances in which ganja-smoking produced insanity, and the patients have generally been violent.

49. Both ganja and bhang are moderately used for this purpose, but it is a mistake. The constant use of the ganja produces impotence.

51. I have known many bad characters who are addicted to ganja-smoking.

53. I know of a case in which an excessive ganja-smoker killed a friend of his with a *latki* without any apparent cause for such action. The culprit was then detained in the lunatic asylum.

54. Heard of such being done, but had no personal experience.

55. Bhang drinking can produce complete stupefaction with admixture.

68. There are retail ganja shops in almost all the important hâts, where it is freely consumed. I object to such consumption, as it induces people who never tasted it to give it a trial.

69. Wishes of the people are never consulted to my knowledge. Local public opinion should be considered. Before opening a new shop subordinate police officers are requested to make a report and these officers know how to report on the matter.

N.B.—My omission to answer any of the questions implies that I do not possess sufficient knowledge to justify me to give any opinion.

Oral Evidence.

Question 25.—In this answer I am speaking of the Goalpara District. Since the figures shown to me do not corroborate my statement as to the increase in the number of shops, but rather show a reduction, I must modify this opinion.

Question 35.—I regard the liquor traffic as more pernicious than hemp, because (1) liquor is prohibited by the religion of Hindus and Muhammadans alike; (2) it is more costly; (3) the drunkard is more offensive to his neighbours, in that he is mischievous and a nuisance to his neighbourhood. As regards the consumer, however, I consider that ganja is more harmful than liquor.

Question 45.—I have actually seen many reputed ganja-smokers who have died from dysentery and lung and respiratory diseases. In these cases I did not make enquiry as to other possible causes of the diseases, and my statement is a general impression only. I have known many people to die of dysentery who were not smokers. I can recall three excessive smokers whose acquaintance I made in the last year. One of them died of dysentery, another has gone half mad, and nothing of consequence has yet happened to the third as far as I have learnt. I have known six people in the course of my life who were ganja-smokers to die of dysentery. I don't know how many excessive smokers I have seen, because I cannot tell when a man becomes an excessive smoker, and ceases to be a moderate smoker, but I have known hundreds of smokers.

The cases of insanity which I have known, I have assumed to result from excessive use. I can recollect about five cases that I have seen in my whole life, and I am 44 years of age. The last case occurred about 16 years ago. I can only remember three other cases of insanity not due to ganja.

Ganja would, I believe, be more fatal to life than alcohol if it were used by the higher classes. The lower classes who consume it are better able to withstand the effects of ganja. I know of no case in which I can ascribe death to either ganja or liquor as the principal cause, but I know of one ganja-smoker who was reported to have died as a consequence of taking ganja. By principal cause I mean the immediate cause. I am not prepared to say that I know any case in which death is to be ascribed directly to ganja or liquor, except one, where the man died under the intoxication of liquor; but I do know cases in which ganja or liquor has apparently caused diseases which have resulted in death. There is no particular case in which I can say that ganja or liquor was the cause, and that other causes did not produce the disease.

Question 53.—The man was mad when he killed his friend.

41. Evidence of KAMINI KUMAR CHANDRA, Kayastha, Bengali, Pleader, Silchar.

1. I have known persons who are confirmed smokers both in the Sylhet and Cachar Districts.

2. Yes. (1) Siddhi and bhang. (2) Charas but it is not used in this part of the country). (3) Ganja: (a) *chipti ganja* (flat); (b) *gol ganja* (round); (c) *chur* (broken).

3. I have been informed it grows spontaneously in parts of Sylhet and also in North Cachar.

5. I am not competent to answer this question.

6. I have been told it is scattered.

7. None.

12. No.

14. I am told bhang is prepared in some parts of Sylhet.

19. I have no information regarding charas, which, I am informed, is not used in Sylhet and Cachar. Ganja is generally used for smoking.

20. Ganja is used generally by the lower order of Hindus; it is not used by the Muhammadans, excepting some rare cases. A large number (it

is difficult to get correct figures, but may be roughly estimated to be over 60 per cent.) of the working classes use it, and sanyasis, ramayats and garden coolies, and also Hindu sepoy.

23. No.

24. Generally people of the North-Western Provinces and also lower classes of Hindus drink bhang and also eat it.

25. The use of ganja is on the increase. Although persons known as *bhadralog*, i.e., country gentlemen of the middle classes, do not now attend what may be called smoking booths, as some of them used to do formerly, the lower orders as a body use the drug. I do not think it will be less than 75 per cent. of the people of the working classes.

26. I would put them as follows :—

- (a) 45.
- (b) 30.
- (c) 20.
- (d) 5.

27. (1) Labouring classes, especially fishermen and boatmen; (2) up-country coolies; (3) hard drinkers; (4) ramayats and sanyasis; (5) prostitutes are the chief consumers.

Among these a large proportion of (1) and (2) are moderate consumers (both habitual and occasional). Hard drinkers and prostitutes are excessive consumers (both habitual and occasional). Ramayats and sanyasis are excessive consumers (habitual). In the case of moderate consumers, no perceptible changes in life takes place. In the case of excessive consumers, they become less thrifty, they care more for the drug than anything else; lose power of self-control, and become more and more enslaved to the drug, and would not attend to anything when they have their craving for the drug unless they get it, and *vice versa*. By giving them some ganja, one can make them do any work which they would not do for love or for money. They become indolent and also excitable.

28. It is difficult to find the quantity consumed by each man on an average, as they usually smoke in company. Roughly speaking—

- (a) Habitual moderate consumers on an average take two to three chillums a dose, costing from one anna to one and-a-half.
- (b) Excessive consumers take four to eight doses, costing from two to four annas.

29. Ordinarily a small portion of tobacco leaf is mixed up with ganja when preparing for smoking. Dhatura is used rarely and by confirmed excessive consumers, the object being to increase the strength. I have no information as to bhang massala.

30. Ganja is seldom smoked by one person. It is smoked in company. It is not confined to the male sex, but females who use it are generally prostitutes. It is not usual, but in some instances, which are unfortunately multiplying, children also take to it.

31. Yes, it is very easily formed. I don't think it is difficult to break off except in the case of habitual consumers. It would depend on circumstances, but generally the tendency is not great towards excessive use.

32. There is the disreputable "Trinath's seva," also called "Tinlok pi's sinni," (i.e., the festival of the saint of three *lokhs*), the latter name pointing to a Muhammadan origin, although I find

from enquiries Musalmans have nothing to do with it at present. It has practically come to be regarded as a cloak for covering the questionable character of the habit under the sanction of what passes (as anything can pass as religion in this country) as religion. It would be ridiculous to consider it as a religious worship. A number of men of the lower classes assemble at night and have vulgar songs and some coarse refreshment, and then smoke ganja (the rule is one pice worth of ganja, one pice sweets and betel-nut, and one pice oil for lighting, which, added up, makes three *lokhs* of the saint). Then those present smoke ganja—every one must have a pull. In the case of beginners, it is nominal. But most certainly this custom forms the training ground for beginners.

In the case of confirmed smokers, the use of the drug in this custom is excessive, but generally speaking the use is moderate in connection with the custom.

33. It is looked upon as discreditable. Ganja-smoker is a term of severe reproach. Calling one by this name may, and often does, lead to a breach of the peace. This condemnation of the drug by social opinion is undoubtedly due to the effects of the drug as seen in the life and habits of consumers. I am aware of no such custom of worshipping this plant.

34. I don't think it would be a serious privation to any class of consumers, excepting, perhaps, ramayats and sanyasis. It will apparently not cause any serious inconvenience to the occasional consumers. In the case of habitual consumers too I have known of persons who have been made to give up the habit with no great difficulty, nor has the privation in any case caused any injury to health, excepting perhaps a slight loss of appetite in the beginning.

35. Yes. I don't think it could be used illicitly if proper measures be adopted. No, I don't think the prohibition would cause discontent, much less political danger. Only I wish to guard myself from being supposed to deny the possibility or even probability of discontent among the ramayats and sanyasis. It would be desirable to get correct information on this point. The prohibition may to a small degree be followed by recourse to alcohol.

36. Yes, alcohol is looked upon as more respectable.

40. I have heard bhang is used in some few cases of dysentery.

41. Ganja is considered by the labouring classes—

- (a) to improve the appetite;
- (b) to give staying power under severe exertion or exposure or to alleviate fatigue;
- (c) to ward off rheumatism. It is also used in indigestion, spleen, and swelling of the body.

Labouring classes and up-country people use it for these purposes.

42. It is not harmless. Ganja-smoking brings on dysentery and cough, and also causes emaciation.

43. They are inoffensive in the sense they do not molest any one unless provoked. But slight provocation is sufficient to excite them.

44. Habitual ganja-smokers do not feel any inconveniences after smoking. They eat more food after taking ganja than at other times.

They feel refreshed after some time, and it is this refreshed feeling that induces them to take the drug again. It does not intoxicate the habitual consumer, that is, moderate use.

45. Yes, it impairs the constitution generally. It causes dysentery and bronchitis. It induces laziness.

46. The effects are more visible in this case. Insanity has been known to result from ganja-smoking.

47 and 48. Children of ganja-smokers do often take to the drug. Whether from heredity or not I have not been able to learn.

49. I have not been able to learn whether prostitutes use ganja as an aphrodisiac, but they use it. I am told bhang is supposed to produce impotence.

51 and 52. I have not been able to collect reliable information in regard to this, but I find in the Excise Report for the Province for the year 1882-83 at page 21 :—"There must be 1,953, say 2,000, or '7 per cent., of the population, or 7 persons out of 1,000, who consume the drug. The statistics of the jail show that 15 out of 132 persons use it,

i.e., 114 per mille"; from which it appears that ganja-smokers furnish a large proportion of criminals.

53. So far as I am aware it does. I have heard of no such case.

54. No (so far as I know).

55. I have read of cases in which bhang is thus used.

58 and 59. The duty may be further increased.

60 and 61. Not necessary to be answered.

62. So far as I am aware, bhang is not cultivated anywhere.

63, 64 and 65. I have not studied this question.

66. No, it is not necessary that there should be different rates.

67. No.

68. I am not aware.

69. Not in the least. It is certainly desirable that local public opinion should be considered.

70. I am not aware.

42. Evidence of GANGADHAR SORMAH, Brahmin, Pleader, Jorhat.

1. I am a permanent resident of Assam, as a pleader by profession.

2. Yes.

3. Hemp is not grown in Assam. Its cultivation is prohibited by Government.

4. The hemp is called *mohini bhang* and the wild hemp is called *jungly bhang*. They are quite different from each other.

5. Wild plant is an annual plant that grows spontaneously in the rainy season on grounds which are of a higher level than rice fields.

6. Scattered.

7, 8 and 9. *Nil*.

12. No.

13. The cultivation of ganja is restricted to the whole province of Assam.

14. No.

19. In these provinces generally ganja, and very occasionally charas, are used only for smoking.

20. Lower classes of people smoke ganja generally. These may be estimated at about ten per cent. of the male population. Higher class people may also be seen to indulge in this drug, but the proportion is very small. The use of charas is very rare, and the exceptional cases are almost confined to the up-country people. These remarks are applicable to the whole of the province.

21. Generally flat ganja is found to be used for smoking. Chur ganja is preferred for smoking.

22. Foreign charas is chiefly used. It is imported from up-country.

23. Bhang is never used for smoking.

24. (a) A small proportion of the upper and lower classes of the people are found to eat

bhang at the time of *Sivraatri* throughout the whole of Assam.

(b) A small proportion of the upper and lower classes of the people drink throughout the whole province.

25. The use of ganja and bhang is on the increase. The general apathy for the use of opium drug and the comparative cheapness of these drugs accompanied with the increase of the number of hâts in the midst of villages where these drugs are exposed for sale are the main causes why the use of these drugs is on the increase.

26. (a) Habitual moderate consumers may be estimated at 60 per cent.

(b) Habitual excessive consumers may be estimated at 50 per cent.

(c) Occasional moderate consumers 10 per cent.

(d) Occasional excessive consumers 10 per cent.

27. (a) Habitual moderate consumers are mainly taken from the lower classes of the people who work hard and who have to undergo the inclemencies of the weather.

(b) Habitual excessive consumers are mainly confined to the fakirs, vagabonds, and spoiled students of the upper and middle classes of the people.

(c) and (d) Both classes of occasional consumers are to be seen in all the classes of the people.

The circumstances in each of these cases which mainly lead to these practices are the association with other consumers.

28. (a) The average allowance is one-fifth of a tola and the cost is five pice.

(b) The average allowance is three-quarters of a tola and the cost is four annas and-a-half.

29. (a) Tobacco leaf is ordinarily mixed with ganja, to sweeten it to the taste.

Sugar and milk are mixed with bhang both to sweeten its taste and to enhance its effects of intoxication.

(b) Dhatura is exceptionally mixed with ganja, mainly to enhance its intoxicating effects.

Spices, such as clove, etc., exceptionally mixed with bhang to have its intoxication further enhanced and lasting.

Bhang massala is unknown.

30. For the most part the consumption of these drugs is practised in company. It is mainly confined to the male sex. No time of life can particularly be fixed after 12 years of age. Children (such as spoiled students) are the general consumers of the ganja drug.

31. The habit is very easily formed. It is difficult to break off; but not so difficult as opium habit. The tendency in the case of all of these drugs for the moderate habit is to develop into the excessive.

32. Among the Hindus the consumption of these drugs is essentially necessary for the solemnization of the Sivratri festival. Without some sort of preparation of these drugs the god Siva cannot be worshipped on this occasion. Among the Muhammadans, although the consumption of these drugs is restricted by religion, the use of ganja is seen at the time of circumcision instead of chloroform. In both the cases above alluded to the use of these drugs is regarded as essential. It is excessive. It is not likely to the formation of the habit.

33. The consumption of each of these drugs is generally regarded with hatred. Among the Hindus the public opinion is against it in enlightened circles from social point of view, and among the Muhammadans, the public opinion is against the practice both from social and religious points of view. The use of this narcotic is generally in disrepute on the following grounds, viz. :—(1) it makes the consumer sickly; (2) it produces no good; (3) it drains the pocket; (4) it wastes the time; (5) it makes one insensible while under the influence of the drug and makes him forgetful of his duties; (6) it improves angry habits; (7) it leads many to insanity, etc. No worship of the hemp plant is ever seen in this province.

34. It may be a serious privation to the habitual consumers, especially habitual excessive consumers, to forego the consumption of the drug they use, but it will never prove fatal. In the case of habitual excessive consumers, the number suffering a serious privation in case of foregoing the consumption of the drug will not be less than half of the whole, and in the case of habitual moderate consumers, it will be about a quarter.

35. Prohibition of the use of charas is entirely feasible; but it is not so with ganja and bhang. There will be some cases of illicit consumption of the latter two drugs. The prohibition can be enforced by exemplary punishments. The prohibition will, no doubt, occasion serious discontent among the habitual consumers. Such discontent will never amount to a political danger in this province. The prohibition will be followed by recourse to alcoholic stimulants and other drugs only in solitary cases.

36. There is no reason for thinking that alcohol is now being substituted for any of these drugs, although the reverse may be a fact owing to the cheapness of ganja.

37. The effects of charas are slow in acting upon the system, but its effects are lasting, while those of ganja and bhang are smart as stimulants but momentary. This is known to me from the report of the consumers.

38. Unknown.

39. Smoking is somewhat less injurious rather than eating or drinking; because the effects of smoking are less lasting than those of eating or drinking.

40. The seeds of ganja and bhang are used as medicines by the Ayurvedic School of Native Doctors. Bhang is especially seen to be used in the treatment of cattle disease.

41. The moderate use of ganja and bhang may be beneficial in its effects in the following cases only—

(a) As a digestive, after 50 years of age, bhang may be beneficial when clarified;

(b) ganja may be beneficial after the age of 40 in giving staying-power under severe exertion or exposure or in alleviating fatigue.

People of sedentary or less hard-working habit use the drug for purposes as stated in (a), and this is confined mainly to the upper classes of the people, but the proportion, however, is small.

Hard-working people, such as cartmen, peons of the courts of justice, sepoy, etc., use the drug for purposes as stated in (b). I refer to the moderate habitual use.

42. Except in the cases referred to in (41), even the moderate use of these drugs is not beneficial, and even then it is not harmless. From the physical point of view, it over-heats the system and thereby impures the blood.

43. Even moderate consumers are not always inoffensive to their neighbours.

44. The immediate effect of the moderate use of any of these drugs on the habitual consumer is to make him a little tipsy. It is refreshing to him. It produces a little intoxication. It does not allay hunger. It creates appetite. The effects last twenty-four hours. The immediate after-effects are to create digestion, etc. The want of subsequent gratification produces uneasiness, in some cases leading to disorders of the stomach and also longing for the drug.

45. (a) Yes; it does.

(b) It impairs the constitution by absorption of blood.

(c) It injures the digestion and causes loss of appetite.

(d) It causes dysentery, bronchitis, and asthma.

(e) It impairs the moral sense and induces laziness, in the case of occasional consumers especially.

(f) It deadens the intellect and produces insanity. It produces permanent insanity.

47. Neither the habitual moderate use nor the habitual excessive use appears to be a hereditary habit. The children of the moderate consumer are affected by the inheritance of the angry habit at least.

48. The children of the excessive consumer are affected a good deal in their physical and mental constitution.

49 and 50. The moderate use of any of these drugs is never practised as an aphrodisiac except by prostitutes, night chowkidars, and so forth. The use of hemp tends to produce impotence.

51. Habitual moderate consumers are not generally to be seen to be bad characters. The moderate use has not had any connection with crime in general or with crime of any special character.

52. About one-third of bad characters are habitual excessive consumers. Most of the petty thieves are habitual excessive consumers.

53. The excessive indulgence in these drugs (bhang excepted) incites occasionally to unpremeditated violent crime. There are cases in which it has led to homicidal frenzy.

54. I do not think they do.

55. Yes, they do occasionally. Complete stupefaction may be induced by this drug with or without admixture.

56. (a) The effects of hemp used in moderation are modified by the admixture of tobacco leaf; and (b) the effects of hemp used in excess are modified by the admixture of dhatura and sweet things. The admixture of dhatura for personal consumption is practised specially by the fakirs and for administration to others by criminals.

57. Eating and drinking of charas are never known to me. Ganja is sometimes eaten or drunk. When ganja is used in such a way, its effects are more severe than bhang or siddhi.

58. The excise administration is capable of a good deal of improvement.

59. It is capable of improvement by prohibiting the sale of these drugs to young boys, the injuries suffered by whom have already been expressed.

60. Ganja is not produced in my province.

61. No charas is produced in my province.

63 and 64. *Nil*.

65. In my opinion the taxation of these drugs should be enhanced so that the consumers are not encouraged.

66. There should be different rates according to their demand.

67. The present method is not objectionable.

68. In all the houses or shops licensed for the sale of these drugs, these drugs are consumed on the premises. In my opinion this system is pernicious.

69. Before a shop is opened in any locality the wishes of the people are neither considered nor consulted. The shops are opened according to the demand. Local public opinion ought to be consulted where it is expected to be intelligent.

70. There being no Native States in the vicinity of this province, there is no importation or smuggling of hemp drugs from this source. Importation of these drugs is suspected from beyond the inner lines from hill tribes by the savage tribes residing in the British territories, such as Miris and Deories.

43. Evidence of REVD. J. P. JONES,* *Missionary, Sylhet.*

1. Only by mixing with the natives for over six years and coming in contact with many who take ganja.

2. Bhang and ganja only are in common use in this neighbourhood. Very rarely charas is used. As far as I know, the above definitions describe the plants in this neighbourhood.

7. Not that I know of.

14. Not to my knowledge.

19. Ganja is used for smoking only in this district, except when mixed with other things, when it is sometimes eaten.

20. Nearly 25 per cent. use ganja. Chiefly among the lower classes.

24. Bhang is only used occasionally at feasts, etc., and then it is chiefly in drink that they take it.

25. I believe the use of ganja is on the increase. This is the opinion of the people generally. Some years ago people were ashamed of taking it, but now the people take it openly.

26. Of ganja only—

(a) About 15 to 18 per cent.

(b) About 2 in a thousand.

(c) About 7 to 10 per cent.

(d) About 1 or 2 per cent.

27. Tea-garden coolies are either habitual or occasional moderate consumers. Where men work in large numbers together, they all become

more or less consumers of ganja. Prostitutes generally take ganja.

The habit of taking ganja is formed by associating with others that take it. On a large bungalow that we are building almost all the workmen take ganja, and they form the habit because one or two bring ganja with them and others join in smoking.

28. (a) From one to two annas.

(b) From six to eight annas.

29. Dhatura is used at times. It is believed that dhatura mixed with ganja cures certain kinds of skin diseases.

30. Ganja is used by the generality of men when at their work, and it is a matter of indifference to them whether they are alone or in company. Bhang (or a preparation of bhang) is chiefly used in company. It is very rarely that children take to ganja.

31. It is easy to form the habit of consuming these drugs, and difficult to give up the habit. Those who have light work or are comparatively idle soon develop into excessive consumers.

33. Respectable people look down with contempt upon consumers of ganja, but the habit is so common among the working classes that they do not consider it in any way a disgrace to take it.

34. The people who take it would certainly consider it a privation to forego it. The people generally would be glad if it were done away with altogether.

* Invited to attend at a sitting of the Commission for oral examination but failed to appear.

35. I cannot say whether it would be feasible or not to prohibit the use of ganja. It would certainly occasion great discontent among the consumers, but would not amount to any political danger.

36. I do not think that alcohol is in any way being substituted for ganja in this neighbourhood.

41. (a) Not in any way I believe.

(b) Yes, it does this. Men often work well when taking ganja, *e.g.*, I have heard of men giving a few pice to buy ganja for boatmen and others where they require a little extra work from them.

(c) I do not think it acts in this way at all.

Those who are moderate habitual consumers and those who are occasional consumers take it as described in (b).

42. Those that work are not injured as far as I have seen ; but those who smoke ganja and are idle suffer greatly from the effects of it.

43. When they take ganja and work they are quite inoffensive, but those who are idle often become very offensive.

44. It certainly gives a feeling of pleasure to the consumer, and allays hunger. I never heard of it creating an appetite, but it eventually creates a craving for the drug itself.

45. (a) I believe it does—physical, mental and moral.

(b) Yes. I think so.

(c) Yes, habitual consumers become more lazy every year, and as a rule they are given to immorality.

(f) I have known several cases of insanity arising from it. Some have a fit of temporary insanity every time they take ganja ; others are permanently insane from it.

(g) The cases I have known could not have had any mental anxiety ; it was solely from ganja-smoking. For at times they would improve and again become insane when taking ganja.

46. It is difficult to define moderate and excessive use in ganja, for some who consume a large quantity daily do not suffer apparently from its use ; others who consume but a very small quantity are immediately affected by it.

47. I cannot say.

49. Yes, it is used so by prostitutes. I think it must be more injurious. Several ganja-consumers that I know are childless, so I gather that it produces impotency.

51. I cannot say.

53. Yes, I have known cases where men become dangerous when they have taken ganja.

54. I cannot say.

56. I only know that dhatura and ganja is mixed for medicinal purposes.

63. I have great objection to shops being opened where ganja can be smoked on the premises. It must be a great temptation to men to spend their time idly there. If sold at all, it should not be consumed on the premises.

68. Yes, and I think they should all be done away with.

69. I do not think people's wishes are consulted at all, and should they be, no shop would ever be opened.

44. Evidence of HARIBILASH AGARWALA, Merchant, Tezpur.

1. Being a native of the country and a merchant, with extensive dealings, in the districts of Darrang and Lakhimpur, I have every opportunity to know the habit of the people, hence I know something about hemp and drugs used by them.

2. Yes, these definitions may be accepted. In our part of the country we have two species of hems, *viz.*, jungli bhang (wild bhang) and mohini (charming) bhang. The former grows wild, and the latter used to be cultivated, though rarely. The cultivation of the latter has been prohibited by the Government, and the Bengal ganja imported to the country.

3. Hemp plant spontaneously grows abundantly in the district of Darrang.

4. They are called jungli bhang.

5. In the present state of the climate of Assam somewhat high land is necessary for their growth.

6. Both dense and scattered.

7. There is no cultivation in the Darrang District.

8. No cultivation.

9. Cannot say.

10. There are no such cultivators.

11. Cannot say.

12. No.

13. No.

14. Yes, only bhang for medicinal purposes, and in the district of Darrang to a limited extent.

15. The wild plants are dried in the sun and used for smoking and drinking purposes ; in the case of smoking, the hemp is mixed with tobacco and then smoked ; and in the case of drinking, it is powdered and mixed with sugar and milk, or water, and then drunk. Some kabirajes mix purified bhang with other articles and prepare balls called modak, and use for medicinal purposes.

16. Prepared in houses from plants wherever grown.

17. Generally all classes make the above preparations with the exception of that called modak.

18. No, provided it is kept in a dry place.

19. Ganja is used for drinking as much as for smoking. Charas is not used in our district (Darrang).

20. Lower classes, specially doms (fishermen), tea-garden coolies and cultivators. No particular localities.

21. Flat.

22. Not used, as stated above.

23. Yes, cultivators and doms (fishermen), and not to any great extent.

24. Not more than five per cent. of the lower class people smoke, and drinking is very rare.

25. No appreciable increase or decrease. No particular reasons can be assigned. But in the case of ganja tendency is to the increase, because it is preferred to bhang for facilitating labour, and it is a protective against cold. Charas is not used.

26. The proportion cannot be exactly ascertained.

27. It is used mainly by the lower class people for facilitating protection from cold; not used for luxury.

28. Cannot be exactly ascertained.

29. The tea-garden coolies sometimes mix dhatura seeds in small quantities with ganja or bhang to increase intoxication. Tobacco is also mixed to increase the quantity.

Yes, bhang massala is prepared out of the following ingredients, viz., poppy-seed, black pepper, mauree, dried cucumber, dried rose petals, chestnut. Most of these can be obtained from the local bazaar.

30. Generally both smoking and drinking are used in company, and occasionally in solitude. It is confined to the male sex, without any fixed time of life. Children do not use.

31. The habit is generally and easily formed by company, and not very difficult to break off. Tendency is to increase.

32. No social custom. But religiously amongst Hindus ganja is given in form of worship to Mahadeva in the shape of ladus or balls, and smoking on the Sivaratri once a year. The custom does not seem to be essential. It is generally temperate. It may lead to the formation of habits.

33. Generally regarded as bad. No public opinion of any kind. The use is generally in disrepute. I attribute this to the evil effects of the drug. Hemp plant is not worshipped.

34. The tea-garden coolies and doms will seriously feel for the drug, as they consider it is useful to them. The probable number of the class cannot be stated.

35. Prohibition is feasible. The consumers will be discontented for a time; but there is no political danger. The prohibition may be followed by alcoholic stimulant or opium.

36. No, because alcoholic drinks are valuable and cannot be easily available.

37. Cannot say, as charas is not used.

38. Cannot say, as we have only flat ganja.

39. Smoking is more injurious, because it easily affects the brain.

40. The preparation called modak is prescribed by native kabirajes. Bhang is used in cattle disease treatment.

41. (a) Bhang-smoking is accessory and digestive.

(b) Smoking gives staying power under severe exertion or exposure, and alleviates fatigue.

(c) No.

(d) No.

The Brahmins, Kayasthas and other classes use

it for the above purposes. Can't say proportion. I allude to the moderate habitual as well as moderate occasional consumers.

42. Even moderate use is not harmless, because the tendency is to increase.

43. Yes.

44. Feels better. Produces intoxication. Creates appetite. Can't say how long the effect exists; it depends upon one's constitution and habit. The after-effects are weakness. Want of subsequent gratification produces longing and uneasiness.

45. Constitution is impaired. Eventually digestion is impaired. Smoking causes dysentery, bronchitis and asthma. It impairs the moral sense and induces laziness. It does not produce insanity.

46. Habitual excessive use impairs the constitution, injures digestion, causes dysentery, etc., etc., impairs the moral sense and induces laziness eventually. Sometimes deadens intellect and sometimes produces insanity. Persons suffering from mental anxiety and brain disease easily fall victims.

47 and 48. No.

49 and 50. Yes. Not used by prostitutes. Used as an aphrodisiac is more injurious. It produces impotence to excessive users generally, and sometimes to moderate users.

51. Not very large proportion. Proportion not known.

52. To a limited extent.

53. May incite unpremeditated crime. Don't know any special case.

54. Don't know.

55. Heard only of such cases. If given in excessive quantity, stupefaction may be induced.

56. Admixture sometimes moderates and sometimes increases intoxication, according to the quantity and quality of ingredients. Sometimes sanyasis mix dhatura seeds.

57. Know nothing of charas. Have no experience in this matter.

58. It is capable of improvement.

59. Reduce the number of shops and increase the duty.

60. No ganja cultivated in my district (Darrang).

61. No charas produced in Darrang.

62. Cultivation is already prohibited in Darrang.

63 and 64. No objection.

65. The taxation ought to be increased in each kind.

66. It is necessary that it should be increased according to the quality of the drugs.

67. I have objections, as I am of opinion that the use should be gradually abolished.

68. No.

69. Probably considered.

70. Can't say.

45. *Evidence of DEVI CHARAN BARUA,* Kayastha, Pleader, Jorhat.*

1. I am a permanent resident of Assam, as a pleader by profession. I come in contact with numerous persons, and as Secretary to the Jorhat

Sarbajanik Sabha I am in touch with large classes of people.

NOTE.—The answers of this witness from 2 to 70 are exactly the same as those of Gangadhar Sorma (No. 42) and are not reprinted.

* Invited to attend at a sitting of the Commission for oral examination but failed to appear.

46. *Evidence of LAKSMIKANTA BARKAGATI, Brahma, Secretary to the Tezpur Raiyats' Association, Tezpur, Darrang.*

1. I am an inhabitant of this district. I had ample opportunities of visiting different places of this district, and frequently came in contact with persons addicted to these narcotics.

2. *Definition of bhang.*—Hemp in wild state is called bhang. Charas not in use here. Ganja not prepared here. Ganja is sold here in three different forms—flat, round and chur; but I cannot say how they are prepared; they are always imported from Bengal, the cultivation and preparation being prohibited by law.

Wild hemp known by the name of bhang. Imported hemp, whether in detached leaves or whether in round, flat or chur forms, are known by the name of mohini-bhang or ganja in this district.

3. In almost every village in this district hemp plant grows spontaneously.

4. Any hemp plant growing spontaneously is called bhang.

5. In my opinion the plant grows on moist soil.

6. The growth of the wild hemp is generally dense.

7. No.

14. No.

19. Charas is not used in this district, perhaps because it is not to be had here. Ganja is used only for smoking by the Assamese, but up-country men and tea garden coolies use ganja for smoking and occasionally for drinking.

20. Doms (Assamese fishermen) and Haries, garden coolies and up-country men specially are addicted to ganja. Doms and Haries might be 40 per cent., up-country men 60 per cent., and garden coolies 25 per cent. The percentages are calculated on the males, as the females never use ganja. In almost every village ganja is used.

21. Three forms of ganja are used here. Flat and round forms are equally preferred; chur is taken in the absence of the flat and round forms.

23. Bhang is not used for smoking here.

24. Natives of this district do not eat but sometimes drink bhang.

25. The use of ganja is on the increase in this district.

26 (a) 80 per cent. of the consumers.

(b) 15 per cent. of the consumers.

(c) 5 per cent. of the consumers.

(d) None.

27. The percentages given in answer to question 26 have been calculated from all the classes mentioned in answer to question No. 20, the proportion being nearly equal in all these classes. In my opinion ganja is smoked only for pleasure, but when once addicted to it, becomes a habit.

28. Ganja is sold here at annas eight per tola. The allowance of habitual moderate consumers is a quarter of tola per diem, and the cost is two annas per diem. The allowance of excessive consumers is one tola per diem, and the cost is 8 annas per diem.

29. (a) Ordinarily tobacco leaf is mixed with ganja, (b) but in very rare occasions dhatura seeds are mixed with ganja. Tobacco leaf is mixed to sweeten; maki; and dhatura seeds are mixed to increase the strength of ganja. I know of no bhang massala in use in this district.

30. 95 per cent. of the consumers smoke ganja in company. It is confined to the male sex, but not to any time of life. It is practised from 16 years upwards.

31. The habit of smoking ganja is easily formed. As far as my experience goes, the habit can easily be shaken off, but the smokers are not willing to break off. Yes, there is tendency to develop into the excessive, but here pecuniary difficulties step in and put a check to the consumption.

32. I know of no such custom, but in Sivaratri festivals ganja is mixed with sweetmeats in minute quantity, which is essential. In the absence of ganja wild bhang is sometimes mixed. It is always very temperate. It is not likely to lead to the formation of the habit, nor is it in any way to any injurious.

33. The consumption of ganja is looked upon with hatred. Ganja-smokers are generally treated with contempt; they are believed to be untrustworthy. Ganja-smokers are not true to their words; they are a source of annoyance to the neighbours; they do not mind their works; these are the reasons why they are generally hated.

34. I have no experience of my own.

35. If ganja is not imported, and if the cultivation is not allowed, then I think the Assamese would give up smoking, and they would find no way to consume illicitly. I do not think there will be much discontent in case of prohibition, and there is not the least fear of political danger. As use of alcohol is looked upon with much greater contempt here, and the persons addicted to it are outcasted, it is not likely that in case of prohibition the smokers of ganja would have recourse to alcoholic stimulants, but a few may take to opium.

36. By the natives of this district alcohol is not substituted for ganja.

40. Wild bhang was used in the treatment of cattle disease, but owing to the strict watch of Government in respect of wild bhang, it cannot be used even in such treatment.

42. Ganja-smoking is always injurious; it affects the brain and temper.

43. Moderate consumers are even not inoffensive to their neighbours.

44. I have no experience.

45. Ganja-smokers are generally weak in physique. Mental power is also affected by it; morality is also depraved. I am told that in the beginning the use of ganja increases appetite, but afterwards decreases it. Yes; it impairs the moral sense and induces laziness and habits of immorality, and deadens the intellect.

46. Excessive smoking produces insanity. I know of one case in which a man of this district having taken to excessive ganja-smoking became insane; he survived the lunacy for seven years, during the last four years of which he was in the lunatic asylum, and he died of dysentery before recovery.

53. Excessive indulgence in ganja-smoking incites unpremeditated crime, such as assault and murder.

56. So much as is known to me has been answered in question 29.

58. As far as I know, the present system of excise administration in respect of hemp is working well, and it requires no further improvement.

60. No ganja is produced in this province.

61. No charas is produced in this province.

62. There is no cultivation of hemp plant in this province.

63. In my opinion the present system of wholesale and retail vend requires no improvement.

64. No.

65. The taxation of ganja is, I think, reasonable.

66. Yes; chur or broken ganja contains no stick, whereas the flat contains enough sticks than the round; therefore in my opinion different taxation is necessary for these three kinds of ganja.

67. No.

68. There are only shops licensed for sale of these drugs. In my view this kind of licensed shops are better than any other system of selling ganja.

69. Before opening of a ganja shop the wishes of the people are not consulted. When anybody applies to open a new shop in certain locality, the district Officer considers it; and after getting sanction of the Excise Commissioner, he puts it to auction on some dates fixed, and sells it to the highest bidder. Before opening a ganja shop, local public opinion is necessary.

70. It is not known to me that hemp drugs are imported from Native States. In my opinion

the duties of the ganjas used are really paid. I don't think that there is any general use of untaxed drugs.

Oral evidence.

Question 1.—I was manager of a saw-mill, and am now paid Secretary to the 'Tezpur Raiyats' Association. I am a native of Assam. The Raiyats' Association is not interested in temperance.

Question 2.—The wild hemp springs up in gardens and good lands about the village, which have been accidentally enriched by manure. It does not grow in the jungles, but it springs up of itself as a weed. People do not sow it. Some of it dies, some is used as cattle medicine. If it is gathered and stored, or if it is cultivated in any way, the man becomes subject to punishment, but not otherwise.

Question 20.—Except among the Doms and Haries, the Assamese use the drug very little. These classes do not form a large proportion of the population. Ganja is used in most villages by a few people.

Question 59.—Since the hemp drugs have such bad effects on consumers, I think it would be well to prohibit their use, and I think this ought to be done. I think spirits also should be prohibited. So far, Assam has not suffered severely from liquor. It will in time. The effects of ganja are already felt. The man who takes ganja goes crazy and annoys his neighbours. I have known one case of that, apart from knowing that there are cases in the asylum. Ganja gives rise to murder and assaults. The ganja-taker becomes suddenly excited and does these things. I have seen assaults two or three times in this town by people whom I knew to be ganja-smokers. When I was steamer agent at Birnath, the Doms, my neighbours, used to quarrel under the influence of ganja, and we had to drive them off. The fact that such assaults and other offences arise from ganja does not come out in trials, because the people do not plead that they have taken the drug. They prefer to say that they never committed the offences at all. The Doms do not drink liquor, nor do the Haries. The Doms at Birnath did not drink liquor. I knew they smoked ganja, because I saw them smoking as I passed along the road, and when they quarrelled, the neighbours said they were ganja-smokers. I have never heard of any advantage from ganja-smoking.

Question 69.—I never heard of any shop being prevented from being established in consequence of people having objected. If the raiyats were asked, they would often object. The Assamese generally eat opium. The foreigners drink and smoke ganja. The two classes are at enmity.

47. *Evidence of RADHA NATH CHANGKAKOTI, Brahmin, Proprietor, "Radha Nath" Printing Press; Municipal Commissioner; Member of Local Board; Secretary to the Upper Assam Association; and Secretary to the Government Girls' School, Dibrugarh.*

1. I live among ganja consumers, and have therefore every opportunity of obtaining information regarding the drug.

2. Flat and round ganja are known in my district, and both are generally known by the name *ubang*.

3. The hemp plant is seen to grow spontaneously everywhere in Assam.

4. Known by two names, called *jungly* and *mohini bhang*. The former is called that which grows spontaneously.

5. The wild hemp is seen to grow abundantly in damp and submerged places.

6. It grows densely in such places where cow-dung are thrown.

7. No.

8 to 18. Do not refer to my district.

19. Ganja and charas are used only for smoking; the green leaves of the wild hemp are used externally in some cases in rheumatic pains, etc.

20. The up-country men.

21. Flat and round ganja is preferred for smoking.

22. Foreign charas is used and imported from those districts in India where it is manufactured.

23. Yes, by people of Upper India.

24. Hindus of Upper India are greatly addicted to drinking bhang.

25. The use seems to be on the increase in my district. The present excise system, under which easy accessibility to the drug is available, is attributable to the increase.

26. Cent. per cent. of adult male Hindus who come from Upper India are excessive consumers of bhang. Among Assamese the percentage of consumers is inappreciable, may be five per cent.; but considering the easy accessibility to the drug, there is every likelihood of this percentage being on the increase.

27. From lower classes and religious mendicants. Their habits of life are indolence and quarrelling propensity, and the consumers say that the use of bhang helps the engagement of the mind upon any subject, and in some instances the bhang is used for immoral purposes.

28. (a) One-and-a-half anna.

(b) Six annas.

29. Ordinary curry spices, but principally nutmeg, cloves, and musk are mixed by well-to-do luxurious consumers. Heard of dhatura being used. The object of these mixtures is only to show luxury. No, I do not know bhang masala.

30. Ganja is practised in solitude by young beginners. There is nothing to prevent children to consume bhang when in bad company.

31. Easily formed. Difficult for young men to break off. There is a very marked tendency for the moderate consumers to develop into the excessive.

32. Amongst Assamese the custom is considered religious in the case of Sivaratri or the annual puja of the god Siva. The use then is regarded essential. The use is generally temperate, but it is likely to lead to the formation of the habit.

33. In Assam, the use of not only hemp, but all other intoxicating drugs, is religiously prohibited. In the *sastras* or the convents of the principal gosains or spiritual guides in Assam the rule against the use of any intoxicating thing is strictly enforced.

34. The prohibition of the drug may be a serious privation to the religious mendicants as well as to other habitual consumers. The percentage of the former will be one per cent. and that of the latter nearly three per cent.

35. Of course the prohibition of the drugs is strongly recommended, and it would no doubt be feasible. If the police use proper vigilance, and the reward system to the informants is continued,

illicit consumption will be totally impracticable. The number of consumers is so insignificant that not the slightest political danger or discontent can be anticipated. The consumers being up-country Hindus and ascetics and low-class people who are so conservative in point of religious observances that they will not use any alcoholic stimulants if the prohibition of the hemp drugs is enforced.

36. No.

37 and 38. Do not know.

39. Both smoking and eating are injurious.

40. No native doctor to my knowledge ever prescribes these drugs for medicinal purposes, neither they are seen to be used in the treatment of cattle-disease in my district.

41. (a) Said to be beneficial by the consumers.

(b) No.

(c) Never.

(d) Application of the green leaves of the hemp plant in pains, etc., is said to be beneficial.

Dyspeptic invalids use the drug as a food accessory, and their number is quite inappreciable. I refer to the moderate occasional use of the drug.

42. I do not consider the moderate use of any intoxicating drug to be harmless, because no man, however strong-minded he is, can ever be expected to be always moderate. In case of illiterate persons who form the majority of the consumers of the drug, the terms moderate and excessive may be said to be synonymous.

43. Believed to be so.

44. To the moderate habitual consumers the drug is said to be refreshing; it does not produce intoxication, nor allays hunger; on the contrary it creates appetite. The effect lasts for nearly a couple of hours, and it produces longing for subsequent gratification and uneasiness if it cannot be had.

45. All the bad effects of the use of the hemp drug enumerated in this question are visible even to habitual moderate consumers of tender age. One of my cousins, who took to the habit of smoking ganja when a school-boy of some twelve years of age, became a permanent insane of the worst type and died ten years afterwards, and I know many other similar cases.

46. Above answer proves that discussion of this question is not necessary.

47. Does not appear to be a hereditary habit.

48. Discussion unnecessary.

49. Said to be so practised, as well as used by the prostitutes. The use for this purpose is said to produce barrenness in case of women and impotence in case of men.

50. Discussion not necessary.

51. Yes. Old moderate consumers are not seen to be associated with any crime.

42. Excessive use of the drug even by habitual consumers is no doubt apt to lead to crime in general.

53. Yes. Yes.

54. Yes.

55. Yes. Yes; more completely in case of non-consumers.

56 and 57. Do not know.

58. Working well, but capable of improvement.

59. In my district the ganja golas are in charge of traders who are not above scruples. In my opinion the principal medical officer of the district

should be authorized with the charge of the drugs, or they may be kept in Government treasury like opium.

60 and 61. Not produced in Assam.

62. Not cultivated in Assam.

63 and 64. I recommend for the total prohibition of the hemp drugs, and therefore need not discuss this question.

65. *Vide* answer to question No. 63.

66 and 67. Discussion not necessary.

68. Yes. Considering the illiterate, immoral, and low class of men who are licensed to sell these drugs, there is nothing to prevent people consuming them on the premises.

69. Never consulted to my knowledge, and no measures are taken. By all means local public opinion ought to be thus considered.

70. Do not know.

Oral evidence.

Question 1.—I am a native of Dibrugarh and was educated there. I am thirty-eight years of age. The Upper Assam Association is purely for the representing of raiyats' grievances, not temperance.

Question 3.—The hemp plant is found in very few cases in gardens and enclosures close to houses, and sometimes in fields. It is seldom in the former, for the police order the plants to be eradicated there. The plant is grown rarely for use, and sometimes for cattle-disease, they say. It is not much wanted for cattle-disease.

Question 26.—Ganja is the excise article. Bhang is the leaves of the uncultivated or wild plant. Very few of the pure Assamese use the wild bhang. Some use the excise ganja occasionally. The Doms use it. The Ahoms, and in some cases the Haris, and in very few cases the Brahmins, use the drug. The use seems to be on the increase. It is easily accessible in the bazars; and the association with foreigners leads to increase. I do not know if shops have increased. The import of ganja is believed to be on the increase; but I cannot speak from statistics. There is a large increase of foreigners in my district.

Question 33.—Spiritual guides, called Gosains in Assam—four of them are the principal guides or Popes of Assam—all forbid the use of intoxicating things. This prohibition is strictly en-

forced among their disciples; not among the people generally. I know the Gosain at Kamai-kia takes bhang; but he is a follower of Durga. We in Upper Assam are followers of Vishnu; not all, but the most. I was not aware that the Chaubies of Mathura (the Vishnavite head-quarters) are great consumers of bhang.

Question 45.—My cousin was a student, and mixed with mendicant fakirs and other bad companions, and learned to smoke from them. He is the case mentioned by the witness Jadu Ram Barcoah. He died a year ago. He was about thirty years old when he died. He took to the use of the drug at about twelve years of age at school. About five years later he became insane. He was insane for ten years, and died about a year ago. His companions were fakirs and people who were idle and lazy. I do not mean that his bad companions were vicious. There was no insanity in his family. I do not know whether the companions of the boy took dhatura. It is believed that fakirs do; but I do not know in this case. The boy, as a little boy of twelve, smoked hard. His parents tried to stop him in vain. He smoked all day, and neglected his education at school.

The other cases I refer to in this answer were two: (1) A tea garden cooly was charged with murder of another cooly, and I was present in Court as jurymen, but not in the jury. The prisoner pleaded insanity, and verdict was "temporary insanity from ganja." The year was 1890 or 1891. I do not remember the name of the accused. The Judge was Mr. L. Johnson. (2) The other case was Nukul Chandra Goshami, who is now in the Tezpur Asylum. He killed a man. He was tried in Dibrugarh seven or eight years ago by Mr. L. Johnson and pronounced insane. These are all the cases I know of hemp drug insanity.

Question 68.—Consumption on the premises is forbidden by the Government, but the retail vendors are not a high class of men and therefore permit it. By "immoral," I merely mean that they are not of a very high tone.

Question 69.—I think local option is feasible. Public opinion can be taken through the Upper Assam Association. The raiyats are fully represented, but not the coolies. Their interests are taken up by Tea Associations. There are local boards; and I think the opinion of the public can be ascertained through them.

48. Evidence of JADU RAM BOROOAH, Assamese Kayasth, Local Board Member; Pensioned Overseer, Public Works Department, Dibrugarh.

1. Met several ganja-smoking coolies when working my garden, and many others using same; had also been seeing ganja-selling shops on several occasions, and saw also using bhang as madak (medicinal pills) made by native doctors or Bez Borooahs, and as bhang sweetmeat and siddhi in religious matters several times.

2. The definition may be accepted for this province. Hemp drugs are known here as follows:—The imported hemp drugs are known as ganja, whether flat or round, and chur as broken ganja. The uncultivated hemp plants are named here as jungli bhang, which is generally used for siddhi and bhang sweetmeat.

3. In all districts in Assam wild hemp plants

grow abundantly, but its growth having been prohibited and restricted, they cannot now be much seen.

4. The male plant with thick and flowery tops and made flat by pressure, keeping generally under hard bed, were classed and named as mohini bhang; and the female plant with seeds and flowery tops grown without care were known as jungli bhang.

6. Dense as much as I have seen.

7. No.

13. Yes, to all districts. To prevent consumption, as ganja supposed to harm brain badly.

14. Only bhang from wild plants.

15. Madak as sort of medicine made by native doctors, mixing bhang finely powdered with sugar and few other spices as stimulant and promoter of digestive power; these are eaten as pills. Siddhi or ghota is made with powdered bhang mixed with milk, water and sugar, and used in certain religious occasions for drinking, and so also with sugar and rice powder used as sweetmeat in Sivaratri day for the worship of god Siva.

16. Bhang can be prepared from the wild hemp plant; ganja cannot be prepared from them.

17. By all classes, generally by Brahmins for religious affairs.

19. As far as my knowledge goes, ganja and charas are used only for smoking.

20. Smoking ganja among Assamese is scarce in present days. Two per cent. would be number. It is most common among the up-country people and coolies, and all fakirs and monks consume it considerably as one of the necessities to stick to their holy devotions, more especially as because god Siva was using it.

21. Flat ganja generally gets easy sale here.

23. I did not see any using bhang for smoking.

24. Among Assamese in religious days, especially by Brahmins, and few of all other classes.

25. Use of ganja is on the increase. Assamese, seeing its use by the up-country traders, coolies, etc., gradually copying and learning it.

26. (a) 60 per cent.

(b) 30 Ditto.

(c) 10 Ditto.

(d) Nil.

27. Labourers, songsters and fakirs. The labourer and songster classes to stimulate them to work, and fakirs to stick their minds to devotions.

28. (a) Two pice to one anna.

(b) About two annas per diem.

29. Tobacco leaf for smoking ganja; dhatura never seen used.

30. Practice is more in company than in solitude. It is confined to male only, to whole time of his life. It is scarcely usual amongst the Assamese children to consume these drugs.

31. Yes. It is difficult to break off. There is tendency to develop into the excessive use.

32. In Assam it is customary among principally Brahmins to use bhang in way of sweetmeat for worshipping Siva once a year in the day of Sivaratri, and siddhi or ghota in the last day of Durga Puja. For Siva worshipping on that day it is considered to offer ganja sweetmeat in the puja, but it is not compulsory for the devotees to eat them. The preparation is temperate, but excessive use is injurious.

33. These drugs are generally regarded as hateful and injurious to mental power. The public opinion in regard to the practice of the drugs is quite against for the use of all forms of narcotic. I attribute general disrepute to the ganja. No custom of worshipping the plant in Assam.

34. There will be none in Assam.

35. It would be feasible to prohibit the use of these drugs and would be a blessing to the people in my opinion. I don't think they would be consumed illicitly. Stopping importation and sale and prohibiting cultivation, a small quantity being kept for sale with restrictions for religious occasions and medicinal purposes. The prohibition

might occasion little discontent among the fakirs for some time and shall never amount to a political danger in Assam. None shall follow to other stimulant, as, excepting fakirs, ganja is being now considered as ruinous drug by the general public here.

36. No.

37. Effect of charas is heard to be not stronger than ganja.

38. No.

39. Smoking is more injurious than drinking, as the former affects in lungs and brains sooner.

40. Assam Bez Boroahs, Kabiraj, use bhang in few stimulant medicines, and raw bhang as digestive medicine in some cattle-diseases.

41. As far as I find, it is especially used to give staying power under exertion by the labouring class, and for pleasure only by the youths of higher classes; at first as moderate occasional use and afterwards habitual.

42. I don't think moderate use even harmless, as it is liable to gradually become habitual, and it harms the weak brains easily, though moderate.

43. Nothing much heard against them.

44. Generally believed to be refreshing; it produces intoxication and lasts from two to three hours, and want of subsequent gratification produces uneasiness. Creates appetite to the beginners only.

45 and 46. (a) Yes.

(c) No.

(d), etc. Yes. I saw three cases of dysentery and bronchitis caused by habitual smoking. It impairs moral sense, but induces no laziness to my knowledge. It does deaden the intellect, and eventually produces insanity to those with weaker brains. I witness two cases of two youths of respectable Assam families becoming insane by smoking ganja for pleasure; one since died after ten years' lingering and the other still alive.

53. I believe so in certain cases. I saw a cooly in my garden and a pensioned sepoy, the former attempting to kill his wife with a dao, and the other seriously beating his wife.

54, 55 and 56. None to my knowledge.

58. Working well.

60. Ganja not cultivated here.

61. No.

62. Present control is good enough.

63. In my opinion, if ganja is not altogether abolished, the present system is good.

64. Existing regulations are quite satisfactory.

65. I prefer heavy taxation to lessen consumers.

66. No.

67. No.

68. Yes. I have nothing to object against them.

Oral evidence.

Question 1.—I am a pensioner and was in the Public Works Department and served in Upper Assam. My answers relate to Upper Assam, from Dibrugarh to Golaghat.

Question 5.—The growth of the wild plant is prohibited. If there are signs that it is cared for,

prosecution is instituted by the police. People are in the habit of rooting up the plant for fear of prosecution. The police will step in if the plant is allowed to grow big enough to be used for smoking. Even if the plant is not cared for, the people will pluck it up fearing that the police will interfere when it is found growing near the houses. This is the action the police take in Dibrugarh and Lakhimpur. I cannot speak about other districts. The wild plant used to grow in Assam before the ganja shops were established.

Question 20.—By ganja we understand the imported drug, by bhang the plant that grows in Assam. The Assamese did not smoke ganja in former days. In my youth the practice was very uncommon. Now the Assamese are learning to smoke to the number of about two per cent. of the population. The classes who are thus learning to smoke are the Cacharis, the Ahoms, and the Brahmins and Kayasths. There are Doms and Haris in the country, but I do not see them smoking. The latter class are prohibited by the religion, as they are followers of their Dehing Gosain. The youths mentioned in my answer to question 45 are, one a Kayasth and one a Brahmin. The people who are taking to the drug live mostly in the towns and the neighbourhood of the shops. In Dibrugarh and Chabua and Rajabbeta, about three miles from Dibrugarh, smokers are to be found. The fakirs and monks used to take the drugs from the wild plants before ganja was introduced. For the most part the foreigners now use it. I don't know of the hemp plant being produced in the hills. As a wood contractor I deal with Miris and Abors, and from that I know they do not grow ganja.

Question 35.—I should be glad to see the drug prohibited in Assam. The wants of the coolies should not be regarded, because the Assamese contract the habit through association with them. I do not think the coolies would object to the prohibition. The users of ganja would not take to opium, because the progress of civilization tends to make people avoid that drug also. I am aware that the Assamese use opium largely. But I do not think they would take opium any the more for ganja being prohibited, because ganja was never used in this country. The coolies would

take to rice liquor. They take it already in addition to ganja, and they would confine themselves to liquor. Liquor would be better for them than opium or ganja since they want a stimulant. By liquor I mean rice beer and country rum. The latter is the Government excise liquor.

Question 45.—The Kayasth was 28 years of age, and the Brahmin 18, when they became insane. They knew English and were very promising. The Brahmin learnt to smoke from an up-country, i.e., Hindi-speaking fakir, who used to live at his house. He died a year ago after being mad for ten years. The Kayasth youth was appointed Sub-Overseer in the Public Works Department and sent to Manipur. He learnt to smoke ganja there, and became insane and was brought home to Sibsagar. He lately came to Dibrugarh, where I saw him. His servants, who were in Manipur with him, said he had gone mad from smoking ganja, and his father brought him from there. He is constantly repeating "Bom Mahadeo," an invocation used by ganja-smokers, and he carries a bael fruit in his hand.

I know another case of an Assamese who smoked ganja with Hindi-speaking fakirs and has become half-cracked. These are all the cases I know.

Question 53.—The cooly I refer to in this answer was a Sonthal. He was kept in jail for a week to see if he was insane, and then he was let go and sent back to my garden. That was more than five years ago. I discharged him soon after his return, the period of his contract having expired. He was never tried for attempting to kill his wife, because no one prosecuted him.

The man who beat his wife was prosecuted, but the charge was dismissed. He was subsequently punished for another offence. The pensioned sepoy was living near my house, and so I know he was an inveterate ganja smoker. After smoking he would always get excited, his eyes would grow red, and he would quarrel with his wife. He was an Assamese of Mangaldai of the Rajbangshi caste.

Other coolies would beat their wives, but not so often or so rashly as these men would do.